IWRP

Integrated Water Resources Plan

FINAL REPORT

January 1997

APPENDICES

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WATERSUP
WS-Local

Santa Clara Valley Water District

APPENDIX A
GLOSSARY

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GLOSSARY

TERMS

Alternative	An inclusive term used to describe a water resource option or strategy under consideration.
Bay-Delta	Sacramento/San Joaquin Bay-Delta
Baseline	Reflects current facilities, contracts, programs and policies. Not a no-action alternative because it includes projects in the planning phase.
Component	An individual water resource option, such as an efficient water-use program, water transfer, or reservoir storage, that has become part of a strategy.
Core Elements	Actions which the District should take under any water supply strategy. Examples include achieving 46,000 af/year of conservation by 2020, and improving reliability of SWP, CVP, and Hetch-Hetchy supplies.
Evaluation Criteria	Criteria used to test how well alternatives satisfy the planning objectives.
Hybrid Strategy	A strategy which includes a combination of components which may complement or balance each other to meet a water supply need.
No Action	Existing facilities and contracts; no changes from current status.
Non-Potable	Not suitable for drinking.
Objective Category	A grouping of objectives with similar applications.
Option	A technology, facility, or measure for augmenting water supplies or reducing demands.
Planning Objectives	The goals against which water supply strategies must be measured.
Potable	Suitable for drinking.
Stakeholder	Any individual who will be affected by or has an interest in the County's long-term water supply.
Strategy	A combination of water resource components, either supply-side or demand-side, that can be used to meet water supply needs.
Thematic Strategy	A strategy which emphasizes a particular component such as recycling, water transfers, or reservoir storage.
Water Marketing	The voluntary transfer, lease, or sale of water or water rights.

ABBREVIATIONS AND ACRONYMS

ABAG	Association of Bay Area Governments
af	acre-feet. One acre-foot equals approximately 326,000 gallons, enough to cover one acre of ground a foot deep.
af/year	acre-feet per year
Board	Santa Clara Valley Water District Board of Directors
BMP	Best Management Practices
Bureau	United States Bureau of Reclamation
CALFED	California/Federal. A joint state/federal effort to find solutions to problems facing the San Francisco Bay/Delta.
CCRWRP	Central California Regional Water Recycling Program
CDP	critical dry period
CEQA	California Environmental Quality Act
cfs	cubic feet per second
CIMIS	California Irrigation Management Information System
County	Santa Clara County
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
CWA	Clean Water Act
DHS	State Department of Health Services
District	Santa Clara Valley Water District
DSM	demand-side management
DWR	Department of Water Resources
EIR	Environmental Impact Report
ESA	Endangered Species Act
EWMPs	Efficient Water Management Practices
gpcd	gallons per capita per day
IWRP	Integrated Water Resources Plan
LBG	Los Banos Grandes Reservoir
LTA	long-term average
mgd	million gallons per day
M&I	municipal and industrial
MOU	memorandum of understanding

NEPA	National Environmental Protection Act
O&M	operations and maintenance
PARWQCP	Palo Alto Regional Water Quality Control Plant
RO	reverse osmosis
RRA	Reclamation Reform Act
SBA	South Bay Aqueduct
SBCWD	San Benito County Water District
SCRWA	South County Regional Wastewater Authority
Semitropic	Semitropic Water Storage District
SFWD	San Francisco Water Department
SJ/SC	San Jose/Santa Clara
SWRCB	State Water Resources Control Board
SWP	State Water Project
TDS	total dissolved solids
ULFT	ultra-low-flush toilet
USBR	United States Bureau of Reclamation
WPCP	water pollution control plant
WTP	water treatment plant

APPENDIX B
LEVEL 1 STAKEHOLDER MEETINGS

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LEVEL 1 STAKEHOLDER MEETINGS

This appendix contains the minutes of the Level 1 stakeholder meetings held in March, May, July, September, and November 1996, plus the minutes of Level 1 stakeholders' October 1996 meeting with the Board.

SANTA CLARA VALLEY WATER DISTRICT
INTEGRATED WATER RESOURCES PLAN (IWRP)

MINUTES OF MEETING WITH EXTERNAL STAKEHOLDERS
MARCH 21, 1996
RINCONADA WATER TREATMENT PLANT

Note: The items recorded on the flipcharts during the meeting are provided as an attachment to these minutes. Please refer to them where indicated.

The meeting started at 10:05 a.m.

Santa Clara Valley Water District (SCVWD), General Manager, Stan Williams, welcomed everyone to the meeting. He asked everyone in the room to introduce themselves and what organization/interest group they represented. The following stakeholders were in attendance:

Interest Category	Representative	Agency
Academic Community	Professor Burton V. Dean	SJSU
Agricultural Users	Nancy Richardson	Farm Bureau
Business Community	Connie Martinez	Joint Venture Silicon Valley
	James Tucker	San Jose Chamber of Commerce
	Elizabeth Zimmermann	Silicon Valley Manufacturing Group
County Planning	Leode Franklin	Santa Clara County
District Agricultural	Peter Van Dyke Fred Angelino (Alternate)	
District Flood Control	Dean Chamberlin Suellen Rowlison (Alternate)	
District Landscape	Doug Nakamura	
Environmental Groups	Julia Bott	Sierra Club
Homeowners	Roald Alexander	United Neighborhoods of Santa Clara County
Other Water Agencies	Steve Ritchie	San Francisco Public Utilities Commission
Public Advocacy Groups	Marcia Allen	League of Women Voters
Water Recycling	Lou Garcia	City of San Jose
Water Retailers	Lorrie Gervin	City of San Jose Municipal Utility
	Scott Yoo	San Jose Water Company

Those stakeholders not in attendance were Craig Breon (Audubon Society) and Art Jensen (BAWUA) .

SCVWD Board members in attendance were Tony Estremera, James Lenihan and Larry Wilson. Water District IWRP Project Team members in attendance were Scott Akin, Belinda Allen, Wendy Ellyn, Jim Fiedler, Amy Fowler, Barbara Judd, Bill Molnar, Alison Russell, John Ryan, Monica Schefski, Louisa Squires, Jack Sutcliffe, and Ray Wong.

Mr. Williams gave an overview of the Water District role in Santa Clara County. He then gave a history of how water has been managed in the past, and indicated that today, water management combines water supply with flood control. SCVWD has a broader scope than most water districts. We are also paying more attention to water quality today. Mr. Williams indicated we must always plan for future water supplies. Water planning has gotten more complicated, and needs more public participation to determine needs.

Mr. Williams briefly discussed Jim Fiedler's leadership role in the IWRP Project.

10:20 a.m.- Jim Fiedler, Executive Project Manager, presented a project overview. These are:

1. Purpose of Plan
2. Background of water supply
3. Water supply challenges
4. Integrated Resources Planning
5. Water Resources Planning Process (chart)
6. Stakeholders' involvement benefits
7. Public participation process

Mr. Fiedler indicated that the Water District is planning to make presentations to all City Councils in Santa Clara County as part of the public participation process.

10:30 a.m -Mr. Fiedler introduced the meeting facilitator, David Blau, from the consulting firm, EDAW. Mr. Blau discussed the following:

1. Role of Level 1 stakeholders

a. Work with the Water District staff.
b. Provide input on concerns.
c. Feedback to staff on aspects of the Project.
d. Communicate IWRP information to other members of their interest group.

2. Staff expectations of stakeholders

a. Stakeholders understand roles, commitment, project purpose, planning objectives, and evaluation criteria.
a. Get input from stakeholders
b. Gain insight into stakeholder perceptions
c. Stakeholders' interest in continuing participation
d. Stakeholders to communicate back to interest group
e. Confirmation of future meeting dates

Then Mr. Blau asked each stakeholder to state the expectations of their particular interest groups. They were as follows:

1. James Tucker - Broad-based, widely accepted plan to achieve water reliability.
2. Steve Ritchie - Management of 2 systems (SF/HH and SCVWD).
3. Marcia Allen - Include many aspects of the community
4. Dean Chamberlin - Preserve share of imported water
5. Lou Garcia - Concern of water quality/recycled water Bay discharge and availability of water.
6. Julia Bott - Realistic demands; full range of options; alternative supply types
7. Doug Nakamura - Reliable resource and expand reclaimed water use - response of landscape industry.
8. Peter Van Dyke - Include other sources, regional approach/state level.
9. Elizabeth Zimmermann - Continued reliability; continued opportunity for input
10. Scott Yoo - Plan to address responsibility and cost. Consensus vs. opinions.
11. Connie Martinez - Addressing economic issues; balance in quality of life.
12. Roald Alexander - Keep community informed. Respond to concerns.
13. Lorrie Gervin - Range of alternatives to enhance reliability and flexibility.
14. Nancy Richardson - Water availability and cost for enhancing watershed maintenance.

One stakeholder asked about getting a record of all the meetings. Water District staff said we would be recording all meetings, that minutes would be taken, and that EDAW would transcribe all flipchart items. As a result, a written record of all meetings would be sent to all stakeholders.

11:00 a.m. - Scott Akin of the SCVWD talked about his roles in IWRP. They were:

1. Assisting Jim Fiedler in implementing IWRP
2. Water conservation - demand management

Mr. Akin discussed the charts representing the IWRP Process by Months within 1996 and the IWRP Planning Methodology chart and Water District staff who are in charge of each process. He also discussed public levels of participation. Thirdly, he discussed stakeholder involvement.

Mr. Blau then discussed preferences of meeting days and times. The meetings would be every 2 months, for a total of 5 meetings in 1996. The group decided to have it on the 2nd Thursday of the month. The originally planned meeting dates have been revised, and are as follows:

May 9	9:00am-12:00 noon
July 11	1:00-4:00pm
Sept. 12	9:00am-12:00 noon
Nov. 14	1:00-4:00pm

11:25 a.m. - Presentations on the OBJECTIVES AND CRITERIA of the IWRP were made by 5 SCVWD Criteria Advocates.

1. Louisa Squires

Ms. Squires stated there would be coordination and assimilation of input by Water District staff, the Board, and stakeholders. She presented the 13 Objectives with the Evaluation Criteria categories. They are as follows:

Objectives	Criteria
1. Minimize rate impacts	- Total rate increase - Maximum yearly increase
2. Minimize district costs	- Net present values (NPV) of District capital and O&M costs including infrastructure costs
3. Protect economic well-being of the County by minimizing costs to the Community	- Impact on water/wastewater agencies cost - Investment in County - Will be addressed with stakeholders
4. Provide equal reliability of water throughout County	- Qualitative assessment - yes/no
5. Include public involvement and maximize public acceptance	- Qualitative assessment
6. Maximize opportunities for recreational and environmental uses	- Characterize, itemize - Qualitative-high, medium, low

EXTERNAL STAKEHOLDER FEEDBACK
March 21, 1996

What are you expecting from this IWRP effort?

- Broad based, widely accepted plan to achieve reliability.
- Clear, coordinated management of the 2 systems (SF/HH &SCVWD)
- Inclusion of many aspects of the community.
- Preservation of our share of imported water.
- Concerns of water quality/recycled water, by discharge and availability of water.
- Realistic view, demands full range of options, alternative supply types.
- Reliable resource and expansion of reclaimed water use ... responsiveness of landscape industry.
- Inclusion of other sources, regional approach/state level.
- Broad-based, continued reliability. Continued opportunity for input.
- A viable plan to address reliability and cost....consensus vs. opinions.
- Bringing forward economic issues, balance in quality of life.
- Keep community informed...hear and respond to concerns.
- Broad range of Alternatives to enhance reliability and flexibility.
- Water availability and cost for sustaining agricultural watershed management.

Next Meetings:

May 9	9 a.m.- Noon
July 11	1 p.m.- 4 p.m.
Sept.12	9 a.m. - Noon
Nov. 14	1 p.m. - 4 p.m.

Comments on Objectives

- Maintain and protect groundwater basins. (Is it included?)
- Protect vs. minimize impacts to community.

Environmental Criteria

- Aren't most biological issues covered by law?
- Without knowing where/what the alternatives are, hard to determine the potential impacts.
- More water to the region will likely enhance the local environment through more instream flows.
- Will be educated on supplies and demand?
- Are we limited to SCVWD impacts only?
- Full geographic range should be considered, but for all objectives?
- Benefits to one area may be adverse to another.
- May want to consider strengthening and/or weakening of laws.
- Will impacts address both urban and non-urban?

- Will we address impacts to people?
- What is the process for incorporating these comments?
- Some alternatives will/will not meet the objectives...Others will be rated relative to each other.
- We may not have a water shortage statewide..need to address efficiency of use, efficiency of the system.
- Cheapest source tends to originate in the area. Need to store it and accept the environmental consequences.. Reservoirs create habitat and keeps water from flowing to the bay. 1975 study identified reservoir sites....water needs to be piped.

Economic Criteria

- Minimize District costs while ....?
- Is a rate "realistic"?
- Costs should be efficient.
- Investments should be smart.
- Perhaps order of objectives is wrong
  - Operational
  - Reliability . . . then Costs
- Economics of supply should have inter-generational equities.
- Use of cost as a demand management measure.
- Survey indicates water is not cheap . . . Objective reads correctly.
- Consider total cost to the user, including special treatment needs so as to keep industrial users in the community.
- Rate increases will have different impacts on different users... agriculture vs. technology ....and value of agriculture as open space.
- Pricing needs to consider the ability to sustain agriculture.

Community Criteria

- "Economic well being" could be measured by jobs.
- How are costs to community measured/defined?..direct and indirect?
- Water availability may be only 1 reason that business and other industries decide to stay or leave....difficult to determine reason.
- Reliability and availability of water will impact decisions to move/settle ... will be hard to measure.
- Cost of water to agriculture includes pumping and infrastructure costs, as well.
- Public acceptance and education must go hand-in-hand.
- Public interest must be solicited.
- Public polls may be a vehicle to test awareness/issues/need for education/acceptance.
- #8 "meets or exceeds"..... only states "meets" in the criteria
- Does #13 include the capture of wastewater for use?
- "in principle" in criterion #__ (one of Belinda's) denotes a possible lack of intent

Operations Criteria

- #4 - Equal reliability
- May result in an inequity when reviewed against who has conserved historically, or who uses water efficiently already.
- May not promote economic vitality.
- Availability vs. cutback
- Is this limited to SCVWD or will it also include SF/Hetch Hetchy or ACWD?

Risk Criterion

- Emphasize local water so we are not dependent on imported supplies.
- Imported water is high risk.
- Impacts to human health and environment may be missing.......is it redundant and captured elsewhere? ---Water quality? ---Environmental?
- Long-term risk vs. shorter-term "vulnerability" to disaster events.
- Would this preclude us from looking at other alternatives?
- Might we want to perform a "triage" and identify or use a tiered approach to using the criteria?

- Reliability (4) and (12) being read the same.
- #7 is important, but covered by law.
- Visit working of #4 and #12, also consider #9 within the category.
- Group #s 1,2, and 3.
- Use "ranked" objectives for triage.

RELATIVE RANKING OF IMPORTANCE AMONG EXTERNAL STAKEHOLDERS

1. Minimize **Rate Impacts**.
   - 3 votes

2. Minimize District **Costs**.
   - 1 votes

3. Protect Economic Well-Being of the County by Minimizing **Costs to the Community**.
   - 8 votes

4. Provide **Equal Reliability** of Water Throughout the County
   - 9 votes

5. Include **Public Involvement** and Maximize **Public Acceptance**
   - 1 votes

6. Maximize Opportunities for **Recreational and Environmental Uses**
   - 0 vote

7. Avoid or Minimize Adverse Impact to **Habitat or Ecosystems**
   - 2 votes

8. Ensure **Water Quality** that Always Meets or Exceeds Aesthetic Issues and All Applicable Standards
   - 6 votes

9. Minimize **Risk** of Providing Supplies
   - 3 votes

10. Maximize **Flexibility** to Meet Changing Water Supply and Demand Conditions
    - 1 votes

11. Maximize **Multipurpose Potential** for Integrating District Functions
    - 0 votes

12. The District will develop Resource Strategies for Meeting 100% of the Water Needs of the County at Least 99% of the time. During Drier Years, the **Resource Strategies will meet at least 90% of the County's water Needs**.
    - 0 votes

13. Promote **Efficient Water Use**
    - 8 votes

SANTA CLARA VALLEY WATER DISTRICT
INTEGRATED WATER RESOURCES PLAN (IWRP)

MINUTES OF MEETING WITH EXTERNAL STAKEHOLDERS
MAY 9, 1996
RINCONADA WATER TREATMENT PLANT

Note: The items recorded on the flipcharts during the meeting are provided as an attachment to these minutes. Please refer to them where indicated.

The meeting commenced at 9:00 a.m.

Jim Fiedler welcomed everyone. He discussed a video about the District that will be shown to help the stakeholders become more familiar with the District's roles and responsibilities in Santa Clara County.

David Blau of EDAW, a San Francisco consulting firm, was the facilitator for the meeting. Mr. Blau reviewed the day's agenda. He then asked the stakeholders to introduce themselves. Stakeholders in attendance were:

Interest Category	Representative	Agency
Agricultural Users	Nancy Richardson	Farm Bureau
Business Community	Connie Martinez	Joint Venture Silicon Valley
	James Tucker	San Jose Chamber of Commerce
	Elizabeth Zimmermann	Santa ClaraValley Manufacturing Group
County Planning	Leode Franklin	Santa Clara County
	Paul Romero (Alternate)	Parks & Recreation, SC Co.
District Agricultural	Peter Van Dyke	
District Flood Control	Dean Chamberlin	Central/North Central Flood Control Zone
District Landscape	Doug Nakamura	Northwest Landscape Maint. Company
Environmental Groups	Julia Bott	Sierra Club
	Craig Breon	SC Valley Audubon Society
Homeowners	Roald Alexander	United Neighborhoods of Santa Clara County
Other Water Agencies	Steve Ritchie	San Francisco Public Utilities Commission
	Art Jensen	SF Bay Area Water Users Assn.
Public Advocacy Groups	Marcia Allen	League of Women Voters
Water Recycling	Lou Garcia	City of San Jose
Water Retailers	Lorrie Gervin	City of San Jose Municipal Water System

Scott Yoo San Jose Water Company

Stakeholder not in attendance was Burton Dean. Alternates not in attendance were Fred Angelino and Suellen Rowlison.

District Board members in attendance were Tony Estremera, James Lenihan, Rosemary Kamei, and Larry Wilson.

Staff present from the District were Scott Akin, Belinda Allen, Wendy Ellyn, Jim Fiedler, Barbara Judd, Bill Molnar, Alison Russell, John Ryan, Monica Schefski, Louisa Squires, Jack Sutcliffe, Walt Wadlow, Stan Williams, and Ray Wong. Also in attendance was Rita Norton from the City of San Jose.

Joan Ryan was also present from EDAW.

1. Louisa Squires spoke on Task B - Define Objectives and Evaluation Criteria (see handout). The presentation outline was as follows:

o IWRP Objectives - Relative Ranking of Importance
  - Provide equal reliability of water throughout the county
  - Protect economic well-being of the county by minimizing costs to the community
  - Promote efficient water use
  - Ensure water quality that always meets or exceeds aesthetic issues and all applicable standards

o Provide Equal Reliability of Water Throughout the County - Operations Category (Strategy)
o Maximize Flexibility to Meet Changing Water Supply and Demand Conditions - Operations Category (Component and Strategy)
o Maximize Multipurpose Potential for Integrating District Functions - Operations Category (Strategy & Process)
o Level of Service - Operations Category (Strategy)
o Minimize Risk of Providing Supplies - Risk Category (Component & Strategy)
o Minimize District Costs - Economic Category (Component & Strategy)
o Minimize Rate Impacts - Economic Category (Strategy)
o Protect Economic Well-Being of the County by Minimizing Costs to the Community - Community Category (Strategy)
o Include Public Involvement and Maximize Public Acceptance - Community Category (Process)
o Maximize Opportunities for Recreation and Environmental Uses - Community Category (Strategy)
o Ensure Water Quality that Always Meets or Exceeds Aesthetic Issues and All Applicable Standards - Community Category (Component & Strategy)
o Promote Efficient Water Use - Community Category (Strategy)
o Avoid or Minimize Adverse Impacts to Habitat or Ecosystems - Environment Category (Component & Strategy)

Mr. Blau then opened up a facilitated discussion with questions and answers (see EDAW attached flipchart notes) regarding Ms. Squires' presentation.

It was pointed out that the order of the Objectives were changed only to put them in certain categories, not by importance. Previously, they had been randomly listed.

2. Barbara Judd spoke on Task D - Project Need and Potential Shortages (see handout). The presentation outline was as follows:

o Task D Presentation Overview
  - Definitions - Baseline Projection, Critical Dry Period (CDP), Risk
  - Santa Clara County - Water Use by Sector
o Water Demand Projections
  - Water Demand Projection Process
    Communicated with City government in this process.
  - Population Projections - Santa Clara County
  - Employment Projections - Santa Clara County
  - Demand Planning Range

Mr. Blau opened up a facilitated discussion with questions and answers (see EDAW attached flipchart notes) regarding the first part of Ms. Judd's presentation.

Ms. Judd resumed her presentation.

o Water Supply Projections
  - Baseline Planning Assumptions - Maximizes Supplies/Minimizes Shortages
  - Water Supply (average values for the hydrological period in AF/yr)
  - Water Supply
o Water Shortages
  - Water Shortages - Year 2020
o Risks and Uncertainties
  - Categories of Risk

Mr. Blau opened another facilitated discussion with questions and answers (see EDAW attached flipchart notes) regarding Ms. Judd's presentation.

3. Ray Wong spoke on Task E - Supply-Side Opportunities (see handout). The presentation outline was as follows:

o Supply Side Components
o Local Components
o Nonpotable Recycling Projects
o Storage Components
o Water Transfers
o Changes to Operations

Mr. Blau facilitated a discussion with questions and answers (see EDAW attached flipchart notes) regarding Mr. Wong's presentation.

4. Scott Akin presented Task F - Demand-Side Management Options (see handout). The presentation outline was as follows:

- o Demand-Side Management Mandates - State and Federal
- o Santa Clara County - Water Use by Sector
  - Residential use is largest sector
- o Water Conservation - Best Management Practices
- o Typical Residential Water Use - Single-Family Residential Dwelling
  - Toilets and outdoor uses are highest.
- o Typical Commercial/Industrial Water Use
  - Businesses are difficult to measure because there is no homogeneity.
- o Program 1
- o Program 2 - Enhanced Program (Program 1 Plus)
- o Program 3 - Regulatory Program (Program 2 Plus) - most difficult to implement
- o Program Comparison - Demand-Side Opportunities by Sector
- o Program Comparison - Water Use Reductions by Sector Acre-Feet

Mr. Blau opened a facilitated discussion with questions and answers (see EDAW attached flipchart notes) regarding Mr. Akin's presentation.

Mr. Blau then asked for any feedback from the stakeholders. Some of the comments were:

-- How can they prepare for the next meeting?
-- Print 2-sided copies of meeting materials.
-- Would like the project goals more clearly stated.
-- State desired outcome in preparation materials.
-- Put one-page summary with bullets of presentation in front of binder.

Mr. Fiedler asked for Board member comments regarding today's stakeholder meeting. The Board members thanked the stakeholders for their participation, and reiterated that the Board would not make comments, but was there to listen.

Mr. Fiedler discussed future Level 1 meeting dates and talked about the upcoming Level 2 meeting. The Level 2 meeting will be held at the Santa Clara Convention Center on August 5, 1996 from 9:00 am to 3:00 pm.

Mr. Fiedler thanked the stakeholders for their participation and feedback.

The meeting adjourned at 12:10 p.m.

Prepared by:

EXTERNAL STAKEHOLDER COMMENTS
May 9, 1996

TASK B: EVALUATION CRITERIA

- Water quality only meeting standards in criteria? Perhaps we should be trying to exceed, this could be improved.
- Level of Service (LOS): Does this include cutbacks in drought years (rationing)?
- It would be helpful to see snowpack statistics, as well as rainfall.
- Can staff provide a summary of the drought periods (1976-77, 1987-92, 1927-34). It would be interesting to see similarities and differences.
- Do lifecycle costs reflect all costs?...Environmental mitigation, etc.
- Is the water rate realistic in reflecting true cost? (clarification on comment from last external meeting)
- The District needs to make sure that those who have conserved in the past are not penalized during the drought.
- Prioritizing objectives... (which the external group did in the first meeting)..How is this information going to be used?
- Why was there a new ordering of objectives?
- How are communities protected against cutback's after implementing conserving programs, BMP's for example.
- The method of cutback during a shortage should be included under the LOS objective. Will there be benefits to those retail agencies implementing BMPs. (This issue should be addressed early on). This must be addressed and set in place, before a drought occurs.
- What impact will watershed management have on water quality and ultimate costs.
- Is using the worst case scenario for planning appropriate? Critical Dry Period (CDP)?

TASK D: PROJECT NEED AND POTENTIAL SUPPLY

- Is the use of ABAG 1990 projections instead of the updated to 1996 projections appropriate and realistic?

- Water Use by sector ~ Growth in industry may be tied closer to household growth than agriculture for example. Has industry been analyzed closely in terms of the growth which may occur and in turn increase the number of households?

- Again, why not use ABAG's most recent data?

(Note: Barbara, here I heard in your response that staff would be updating to 1996, when that data became available by census tract. Are we indeed going to do that for this project, or is that something that will be done, but not necessarily in relationship to the IWRP effort.)

- How do you factor in the General Plan goals of the cities within the District?

- I feel the range makes sense. The updated ABAG 96 projections if incorporated would move the bottom of the range up, but you would still be within the range.

- Does the 500 TAF assume the population expansion reflected in 1996 ABAG, the higher water use of 1991, and high industry figures. Would we be outside of the envelope if those were combined?

- How does 46 TAF for conservation compare to what the District is on target for today?

- Is reclamation included within Baseline demand?

- Do the reclamation projections include projects county-wide or just District projects?

- Savings need to be recognized clearly in relationship to the way demand is presented.

TASK E: SUPPLY-SIDE OPPORTUNITIES

- When will see costs for the components?

- Can we recover the costs of benefits for water flowing to San Benito County (south of District)?

- Will staff be examining the cost of additional savings through conservation?

- Has desalination been ruled out?

- Staff should include the range of costs ~ not just capital costs.

- There may be opportunities with San Francisco Water District for regional opportunities in local reuse, Steve Ritchie will forward letter outlining those.

- Long-term reliability should be in terms of the region not just the District.

- Regional opportunities for developing supplies with SFWD and EBMUD should be kept in mind.

TASK F: DEMAND MANAGEMENT

- Are moisture sensors for exterior landscape an option?
- The key to conservation is educating customers.
- Would cost information be comparable to that shown for supply options ($/ac-ft)?
- Information on market penetration or coverage rates is needed. How much it costs to capture the added increments of customers.
- Wastewater flow reductions through new mandates, should be included (15 mgd).
- Conservation must also be evaluated in terms of loss of revenue and the potential impact on rates.
- Tracking of conservation success ~ Can it be expressed.. for example.. in per household water budgets?
- Are conservation programs directed at average or drought year demand?

POTENTIAL THEMES FOR STRATEGY DEVELOPMENT

- Structural/Non-structural solutions
- The use of the 5 categories
  - Risk ~ Least Risk Alternative
  - Economic ~ Least Cost Alternative
- Staff may want to acknowledge the drought period for any alternative with reduced expectations as a method to examine reducing costs. For example: test different levels of short-term drought management programs within a Strategy.

CONCLUDING COMMENTS

- Staff and the external stakeholders should remember that imports are over one-half of supplies to the District. The District will likely be in competition with others in the future. We all must acknowledge the political process and potential outcomes in this arena.
- Political persuasion could be included within the evaluation of Strategies.

- It would be helpful to External Stakeholders if there was a summary sheet as a preface to the next mailout, stating what the goals of the next meeting are and expectations for the outcome or what staff is expecting from the external group. Also summarizing the executive summaries of the tasks included.

- Please print double sided- the quantity of paper is becoming cumbersome and we will save a couple trees by the end of the project.

SANTA CLARA VALLEY WATER DISTRICT
INTEGRATED WATER RESOURCES PLAN (IWRP)

MINUTES OF MEETING WITH EXTERNAL STAKEHOLDERS
JULY 11, 1996
RINCONADA WATER TREATMENT PLANT

Note: The items recorded on the flipcharts during the meeting are provided as an attachment to these minutes.

The meeting commenced at 1:00 p.m.

External stakeholders attending were:

Interest Category	Representative	Agency
Academic Community	Professor Burton Dean	SJ State University
Agricultural Users	Nancy Richardson	Santa Clara County Farm Bureau
Business Community	Connie Martinez	Joint Venture Silicon Valley
	James Tucker	San Jose Metropolitan Chamber of Commerce
	Elizabeth Zimmermann	Santa Clara Valley Manufacturing Group
County Planning	Paul Romero (Alternate)	Parks & Recreation, SC Co.
District Landscape	Doug Nakamura	Northwest Landscape Maint. Company
Environmental Groups	Julia Bott	Sierra Club
	Craig Breon	SC Valley Audubon Society
Homeowners	Roald Alexander	United Neighborhoods of Santa Clara County
Other Water Agencies	Steve Ritchie	San Francisco PUC
	Art Jensen	SF Bay Area Water Users Association
Public Advocacy Groups	Marcia Allen	League of Women Voters
Wastewater/Water Recycling	Lou Garcia	City of San Jose, Environmental Services
Water Retailers	Lorrie Gervin	City of SJ Municipal Water System
	Scott Yoo	San Jose Water Company

Also in attendance was Debbie Caldon from the City of San Jose.

Stakeholders not in attendance were Fred Angelino, Dean Chamberlin, Leode Franklin, Suellen Rowlison, and Peter Van Dyke.

District Board members in attendance were Bob Gross, Rosemary Kamei, James Lenihan, and Larry Wilson.

Staff present from the District were Scott Akin, Belinda Allen, Rick Callender, Wendy Ellyn, Jim Fiedler, Amy Fowler, Kent Haake, Barbara Judd, Bill Molnar, Terry Neudorf, Carol Presley, Alison Russell, John Ryan, Monica Schefski, Louisa Squires, Jack Sutcliffe, Melanie Tucker, Walt Wadlow, Stan Williams, and Ray Wong.

Participants from EDAW, a San Francisco consulting firm, were Jackie Millet, John Petrovsky, Joan Ryan, and Eric Zigas.

Jim Fiedler welcomed everyone and reviewed the day's agenda.

Eric Zigas was the facilitator for the meeting. He said that each of the presenters would be giving a very brief presentation in order to allow more time for questions and input from the stakeholders. He then introduced the first speaker, Belinda Allen.

Ms. Allen talked about Objectives 5 and 11 and Scott Yoo's suggestions for revision of their wording. The revisions help in rating Components and Strategies for developing an overall plan. Differences between old Objectives and new Objectives: new ones focus on source water quality and end product and the old ones focused on the end product only. Scott Yoo said the main reason he looked at these Objectives was because customers wanted to enhance the quality of drinking water. Ms. Allen also mentioned that another bullet was added to the definition of the Risk category to reflect changing water quality regulations.

Amy Fowler then presented the 8 Thematic Strategies and what is included in each one (see handout of the 6 slides). She talked about the chart summarizing the Baseline water supply and demand. She also discussed the Core Elements, which are actions that make sure Baseline assumptions continue to be valid.

Ms. Fowler indicated where we are in the process of evaluation of Strategies and where we want to go. She explained the selection and evaluation process of the Strategies and how we might combine the best Components to get the best Strategy, or perhaps hybrid Strategies that may involve several Components that work well together (see Table G-2 handout).

Mr. Zigas explained the Summary Table of Thematic Strategies and facilitated discussion.

Questions were presented by the stakeholders regarding the Strategies (see External Stakeholder Notes attached).

Mr. Zigas then explained the process of stakeholder ranking of Strategies, and that the two main goals for discussion would be the Well-being of the Community and Level of Service Objectives. The stakeholders will be separated into small groups to discuss formation of hybrid Strategies that balance Objectives. Mr. Zigas explained how the Strategy charts were set up, how to interpret them, and how staff arrived at their ratings for each Strategy. He said the issue is "how to rate Alternatives", and that Objectives have Alternatives on a 9-point scale for all Strategies.

Connie Martinez pointed out that Quality and Reliability of water are decision-breakers for companies moving to Silicon Valley.

The stakeholders then separated into 3 groups to do an exercise in the formation of Hybrid Strategies (see results of breakout sessions in the attached "External Stakeholder Notes").

Barbara Judd then discussed lessons learned from the first round of screening. She stated the Project Team discussed an Objective for maximizing the use of the water supply from an operational standpoint, i.e., are we making the best use of what's available to us in a wet and average year vs. a dry year? The Project Team had difficulty with ranking the Flexibility category, i.e., flexibility to respond to changes of conditions. The Project Team came up with the idea to add an Objective to "Maximize ability to respond to changing conditions."

Jack Sutcliffe had conducted an IWRP phone survey with the external stakeholders and shared some of the comments and suggestions he received. Some of the comments were:

- The project is well-organized and the handouts are very thorough, but somewhat overwhelming in the amount of information presented
- Not enough interaction in first 2 meetings
- Should have longer meetings because of amount of complex information involved

Mr. Sutcliffe said that he felt the breakout sessions of today's meeting were positive in that the stakeholders could voice ideas. He also felt that the stakeholders did not seem hesitant to make comments during the meeting in general.

One of the stakeholders asked what is Level 1's obligation in the Level 2 meeting on August 5. They were told they are invited, but do not have an obligation to attend. If they attend, they could gather information and report back to the Level 1 group. If they do not attend, they will receive feedback about the meeting at the next Level 1 gathering in September. Mr. Fiedler relayed the general content of the Level 2 meeting to the stakeholders.

Stan Williams announced that the Board is having a meeting on recycled water the following Tuesday for those who want to attend.

Mr. Fiedler announced that the next Level 1 meeting would be on September 12, 1996 from 9:00-12:00 noon. The meeting was adjourned at 4:15 p.m.

Prepared by: Monica L. Schefski, Administrative Secretary

IWRP External Stakeholder Notes
July 11, 1996 Meeting

Objectives and Criteria Discussion

Discussion of proposed changes to Objectives 5 and 11.

Comment on proposed change to Objective 11:
Water quality discussions should be tied to cost.

Theme Strategies Discussion

Comments

Comment: Is the team distinguishing between voluntary and mandatory reductions? Is the rationing shown intended to be mandatory rationing? Staff needs to differentiate between voluntary.
Mandatory rationing is assumed in Strategy #8 only. Should look at voluntary reductions before rationing.

Comment: #3 Does it assume new surface storage?
No, just recycling; is potential hybrid strategy; storage isn't needed to make it work.

Comment: 100% RO with no brine discharge?? Is that possible??
Rated low in risk because uncertainty regarding that issue.

Comment: #1 What is total system failure (referred to in Strategy #1)? ...I question the term... I think "severe shortfall" would be better.

Comment: #2 Policy needs to distinguish between new and existing customers...(Example Dougherty Valley and EBMUD). Any existing policy?

Comment: Does demand management distinguish in Strategy #2 between existing customers and serving new?
No distinction at this time.

Comment: Strategy #3-Rate and Rate increases-what are the numbers? We would like to get numerical values, and how much each strategy would increase rates.
John Ryan has information on first cut; this type of information will be obtained during evaluation of the hybrids.

Comment: Strategy #5 that produces more water than needed (550 AF reservoir) will be viewed as having growth-inducing potential--CEQA problems. We should identify and limit strategies that provide excess water. You need to explain why you would go above the 100 TAF.

Comment: Strategy #6 - explain the risk of adjudicating a groundwater basin in the water banking scenario?

This has the potential for being a time-intensive process. It hasn't been tested in courts and, therefore, may not be able to bring banked water back to County. Would rather be viewed as "good" guys, bringing water to basin. Want to be viewed on equal footing with other parties in adjudicating.

Comment: In Strategy #6, a description includes the term "demonstrated" in referring to the new Semitropic water banking arrangement with the District. Semitropic shouldn't be used as justification for anything...it is currently on an experimental basis and very risky. The District doesn't even know if it will work. Hasn't "demonstrated" anything. The District has no idea of the unintentional risks yet.

Comment noted.

Comment: Long-term transfer impact...Strategy #6-Environmental impacts could potentially occur-farming going out of production to expand urban development will have impacts. Need to look further. If agricultural land is replaced by urban, then there could be large risks. Need to address the long-term viability of Central Valley agricultural land.

Comment: Long-term transfer scenarios--transfer of water is irrelevant to urbanization. It is a land use planning issue, not water policy. Urbanization will occur regardless of water policy due to the high cost of living and other factors.

Comment: In terms of the CVP water left over in entitlement which is not used on a year-to-year basis, what happens to it? In years when you didn't need all CVP water, would you take it even when you didn't need it in a given year and bank it?

Yes.

Comment: What are we doing now? When we don't take the water, does it go somewhere else or into the Delta?

Historically, the District has not taken the water even though we've been paying. Typically, it is reallocated to other users.

Comment: If all excess water is put to use, won't we lose fluctuations in environment? Will we just meet minimum flow standards?

We wouldn't see big difference locally and statewide; we would still see flood events and fluctuations.

Comment: What are the blanks on costs in the chart?
Where there is no number on cost, this means we have to do more study and analysis of costs.

Comment: What costs are being used for banking?
Semitropic banking costs are being used because we are talking about a lot more water. Also, banking is environmentally friendly so it may become easier/cheaper in the future. Also, water going into water banking is not paying to store in a location (hard to break out costs).
Removing the institutional barriers could move banking forward, although analysis of costs is complicated.
Semitropic is approximately $235/ac-ft based on given assumptions..how long will water be stored?

Comment: Sometimes water quantity is solid, others are questionable. When uncertain, use range (for example, with demand management).
Comment noted.

Comment: Are all of the ratings relative to Level of Service (LOS) in respect to 500 TAF demand? How will the evaluations address the range (350-500 TAF)?
Yes, we'll explore how to take into account 350-500 TAF demand later today, and especially during development and evaluation of the hybrids.

Comment: On Page 1 of the Thematic Strategies summary...water recycling numbers are misleading, you may be missing 60 TAF from recycled water, in addition to the 14,400 included in 1997. The numbers for conservation are shown for 2020 (46,600 AF). Shouldn't reclamation also be shown in terms of what's expected in 2020? The 14,400 AF is projected for 1997. An addition of approximately 51 to 72 TAF could be added by 2020.

Comment: If true, this is a huge shift in our focus. This would drastically change future needs. This needs to be looked at further because this is approximately 60% of the supply we are looking for.

Comment: Strategy #2 and the impacts of demand management need to be looked at further. If you reduce water demand, you will raise rates. There is a rate component associated with reduced water use. If you reduce water use 10%, rates will go up approximately 10%. Rates need to be looked at in terms of shortage outside of other components.

Comment: Can the District only use recycled water for certain uses? Have demands by end-users been identified for 60,000 AF of recycled water? Landscape industry is approximately 7.5% of the total, which would only be approx. 37 TAF....Who else would use recycled water? Isn't it limited?
Other users could include industrial and agricultural customers.

Comment: How realistic is using recycled water for potable uses?
This is discussed in the ratings in terms of public acceptance, risk, water quality.

Comment: Transfers from others? Does that include SFWD?

Stakeholder Ranking of Strategies-Discussion (LOS and Economic Well-Being)

Economic Well-Being

Comment: Pricing policy has impacts especially for reclamation. Agricultural subsidies could create impact. This is only looking at District costs, not 3rd party/customer additional costs?

Comment: Limited way of looking at costs with Strategies #6, #7, it is assumed the District incurs all costs of recycled water programs. Costs of doing anything are presumed to be District costs.

Comment: Does it include additional costs of treatment for recycling?

Comment: LOS difficult to discuss without knowing the costs of different levels.

Comment: Economic Well-Being could prevent companies from leaving. Factors would include Shortage, Water Rates, Water Quality.

Comment: Can't separate water quality for rates. This could be cleaned up by focusing on costs and then looking at financing.

Comment: Companies don't move to Silicon Valley because of low cost. Quality and reliability are decision-breakers.

LOS

Comment: Why was historical period chosen? We should use future simulations and analysis of extreme cases (Example '87-'92 drought followed by a '76-'77 drought) instead of assuming the future will duplicate the past. Consider a variety of futures.

Comment: Sensitivity analysis important.

Comment: Looking at worst or best scenarios is unnecessary - examine a reasonable range of scenarios. We have enough variability of chances, extreme scenarios are unlikely.

Comment: It is difficult to understand evaluations for some objectives such as recreation, which are very subjective (recreation, environmental and others). Some are rated objectively and some subjectively; it is difficult to balance. Is hiking more important than fishing, etc.? It is difficult to understand the subjective ratings. Focus on those which you have objective numbers for.

Comment: Do we know the user's acceptance level in terms of rates?

Comment: Perhaps LOS expectation is too high; should be a range.

Comment: The LOS question posed is difficult unless costs are known. Presently, there is incomplete information in order to answer.

Comment: Was LOS expectation too high? Survey people may not be willing to pay for this LOS. Would industry even be willing to pay for this?

The background is that the Board would like to test this LOS- what are the costs and impacts associated with this LOS? Later we'll come back to you & the Board and see if you are willing to pay for that level; the Board may then choose to revise that level if it is found to be too costly.

Comment: There is currently not enough information available for us to do this exercise; need to know the consequences of magnitude, frequency and duration in order to evaluate.

Comment: Should also investigate decreasing the LOS. What are the consequences of various levels of shortage? Different worst-case events. Then it could be decided whether a specific solution provided more reliability during drought.

Comment: Range in demand and what happens during shortage needs to be evaluated. Not just impacts on industry. (Example: chip manufacturer.)

Comment: Duration is most important; one year is pretty bad. Frequency would be next in importance, then magnitude.

Comment: Agree magnitude and frequency are similar. It is difficult to distinguish between these two, but duration is most important.

Comment: For agriculture, it would depend on the source of water-groundwater or surface water-as to impacts of LOS as well as what time of year it happens.

Comment: Residential takes the bigger hit. Need to re-landscape. Chronic shortages lead to chronic weed lots.

Comment: Retailers...Industrial customers pay the fines. Residential customers take the major hits.

Comment: Killing landscape is a symbolic gesture. Industry water use not as visible.

Comment: Landscape industry - we'll use recycled water; don't have to kill landscape. Shouldn't be traded off symbolically.

Comment: People during drought have undesirable level of personal changes. Residential customers subsidize the cuts of others. Many structural and behavior changes have occurred. The value of landscape includes aesthetics and quality of life.

Comment: In critical dry periods, use of water for landscaping is considered waste of water. Some equate green lawn with waste. Yet, residential customers don't have access to recycled water.

Comment: The difference between conservation for industry in growth vs. non-growth periods is important.

BREAKOUT SESSIONS

Three breakout groups were created by staff and asked to participate in the development of hybrid strategies. Stakeholders were assigned to each group to ensure that different viewpoints were represented within each group. A facilitator and technical advocate were also assigned to each group. The groups were directed to incorporate those components which made the most sense based on the information presented.

Four common components were included in each group's hybrid strategy: Water Transfers, Water Recycling, Water Banking and Conservation. However, the groups wanted more information on the cost breakpoints and potential markets for the Water Recycling options. Maximizing Existing Local Storage was included in one strategy. One of the groups did not think the New Reservoir Storage component should be included in a hybrid strategy since the economic and environmental costs associated with a reservoir would be significant. Also, there was some concern expressed about the damage from a potential reservoir failure.

Breakout Group #1 included Craig Breon, Connie Martinez, Roald Alexander, Scott Yoo, Doug Nakamura, and Dr. Burton Dean. The hybrids developed by Group #1 incorporated the following components. Group #1's hybrid included:

• Long-term Transfers/Banking	(40 - 55 TAF)
• Conservation	(20 - 25 TAF)
• Non-Potable Recycling	(25 - 35 TAF)
• Short-term Transfer	(as needed)

The group expressed concerns about the costs and market for the water recycling component. They did not feel comfortable with potable water recycling and they did not believe there were enough end-users to justify a range larger than 25 to 35 TAF. Non-potable recycling was attractive to the group because it was the only component which really created new water. The group was behind the idea of water conservation, but did not want mandatory measures and found measures along the lines of Program 2 acceptable. The group felt some additional level of conservation should be included to provide prudent stewardship of resources. Both recycling and conservation seemed favorable because the group liked the idea of owner-operated components, rather than those which rely on components outside of the District's control.

Members of Group #1 liked the idea of water banking and wanted it integrated with a long-term transfer strategy - something that would bring new water to the table. Everyone agreed that the Thematic Baseline Strategy #1 was unacceptable. There was some discussion about removing Thematic Strategy #5, New Reservoir Storage, due to environmental and implementation obstacles. However, the group could not reach a consensus; some thought there would be potential benefits to a joint out-of-county project due to cost-sharing and risk-sharing. The group liked the flexibility of the short-term water transfers.

Breakout Group #2 included Julia Bott, Jim Tucker, Lorrie Gervin, Art Jensen, and Paul Romero. Group #2's hybrid included:

• Maximizing Existing Local Storage	(20 - 30 TAF)
• Conservation	(5 - 30 TAF)
• Recycling/Reuse	(40 - 65 TAF)
• Transfers/Banking	(as needed)

This group felt strongly that the efficiency of the existing system should be maximized since it would result in more local control, better stewardship of resources, and less reliance on outside sources. They believed that conservation was "a must" in any future plans. The group also thought that Thematic Strategies #6, 7, or 8 were good options and should be given equal consideration. The group suggested that the Project Team identify cost/feasibility breakpoints to determine the contribution of each component. The group also made note of the fact that new storage (i.e., reservoir) is not viewed by the group as a component of a preferred hybrid strategy.

Breakout Group #3 included Lou Garcia, Marcia Allen, Nancy Richardson, Steve Richie, Elizabeth Zimmermann, and Stan Williams. Group #3's hybrid included:

- Water Recycling (did not quantify)
- Water Banking
- Conservation
- Transfers

This group did not feel comfortable assigning quantities of water to any of the components or prioritizing any of the components. They felt that the Project Team should move forward with all four components in a combined strategy. However, they think emphasis should be placed on the less expensive options. The group disagreed with the Risk ratings of the Water Recycling and Conservation components. They believe there is less risk associated with these components. The group thinks Water Conservation must be included in any future strategy. The group prefers Water Banking to Reservoir Storage. They think it is less expensive and has less environmental impacts. They also believe that consensus is building for Water Banking and that it will become easier to implement in the future. This group had difficulty comprehending the rating sheets for the 8 Thematic Strategies.

Lessons Learned Discussion

Objective changes.

- Maximize efficient use in wet and average years (operational).
- Maximize ability to respond to changing conditions (risk).

External Stakeholders approved.

Comment: What about total cost, inside District, outside District and cost of shortage? These need to be combined.

Meeting Closure

Materials were organized and thorough, but often overwhelming and complex.

Next meeting September 12, 9 a.m. to 12:00 noon.

SANTA CLARA VALLEY WATER DISTRICT
INTEGRATED WATER RESOURCES PLAN (IWRP)

MINUTES OF MEETING WITH EXTERNAL STAKEHOLDERS
SEPTEMBER 12, 1996
RINCONADA WATER TREATMENT PLANT

Note: The items recorded on the flipcharts during the meeting are provided as an attachment to these minutes.

The meeting commenced at 8:00 am.

External stakeholders attending were:

Interest Category	**Representative**	**Agency**
Business Community	James Tucker	San Jose Metropolitan Chamber of Commerce
	Elizabeth Zimmermann	Santa Clara Valley Manufacturing Group
County Planning	Leode Franklin	Santa Clara County Environmental Resources Agency
District Flood Control Advisory Committees	Dean Chamberlin	Central and North Central Flood Control Zone
	Suellen Rowlison	South Flood Control Zone
District Landscape	Doug Nakamura	Northwest Landscape Maint Co
Environmental Groups	Julia Bott	Sierra Club
	Craig Breon	SC Valley Audubon Society
Homeowners	Roald Alexander	United Neighborhoods of Santa Clara County
Other Water Agencies	Steve Ritchie	San Francisco PUC
	Art Jensen	SF Bay Area Water Users Assoc.
Public Advocacy Groups	Marcia Allen	League of Women Voters
Wastewater/Water Recycling	Lou Garcia	City of San Jose, Environmental Services
Water Retailers	Scott Yoo	San Jose Water Company

Also in attendance were Mary Jo Albee, City of San Jose; Marge Bruno; Debra Caldon, City of San Jose; Nancy Trankle, Home Builders Assoc.; and Greg Zlotnick.

Stakeholders not in attendance were Fred Angelino, Professor Burton Dean, Lorrie Gervin, Connie Martinez, Nancy Richardson, Paul Romero, Peter Van Dyke.

District Board members in attendance were Tony Estremera, Rosemary Kamei, Jim Lenihan, and Larry Wilson.

District staff members present were Scott Akin, Belinda Allen, Terri Anderson, Wendy Ellyn, Jim Fiedler, Amy Fowler, Kent Haake, Barbara Judd, Bill Molnar, Terry Neudorf, Alison Russell, John Ryan, Monica Schefski, Louisa Squires, Jack Sutcliffe, Melanie Tucker, Walt Wadlow, Stan Williams, and Ray Wong.

Present from the consulting firm, EDAW, were Joan Ryan and Eric Zigas.

Jim Fiedler welcomed the group and reviewed events of the IWRP Project since the last external stakeholder meeting in July. He talked about the Level 2 Public Forum held Aug. 5 at the Santa Clara Convention Center, where we received valuable input from the participants and they, in turn, felt very positive about the meeting. Mr Fiedler said that the Level 2 attendees felt most strongly about the following issues·

1. Mitigating environmental impacts, not enhancing them.
2. Taking a stronger stand on land use planning.
3 Additional education for the community.

It was also determined at the Level 2 meeting that there needs to be a better understanding about components

Mr. Fiedler encouraged the external stakeholders to contact either him or Jack Sutcliffe if they have questions between now and the next external stakeholder meeting in November.

Mr Fiedler talked about the last external stakeholder meeting in July where Thematic Strategies were discussed. Today we will be talking about 4 Hybrid Strategies and would like input from the stakeholders on this

Eric Zigas then reviewed the agenda for the day He went over where we are in the IWRP process

Scott Akin talked about Demand-Side Management Options (see handouts):

- Baseline
- Program 1 - 11,000 AF/yr above Baseline
- Program 2 - 24,000 AF/yr above Baseline

Melanie Tucker talked about water recycling (Indirect Potable Reuse [IPR]) (see handouts). There are 4 plants in Santa Clara County.

- No Direct Potable Reuse
- Why IPR? It offers flexibility through use of existing raw water facilities.
- Nonpotable Demand; offers limited disposal capacity during winter months
- Offers flexibility through use of existing raw water facilities
- Groundwater recharge through surface spreading; groundwater recharge through direct injection; surface water augmentation.

Risks of IPR are:

1. Public acceptance
2. Regulatory compliance
3. High cost

Bill Molnar spoke about New Reservoir (see handouts):

- Storing imported water
- Offstream storage facility
- Investigate Los Banos Grande - not much watershed
- Reservoir Impacts

Terri Anderson spoke on Water Banking (see handouts):

- Takes 2-3 yrs. to implement
- 30- to 40-year contract term with renewal provisions

Potential Risks
- Contract renewal
- Adjudication

There would be no change in water quality and minimal environmental impact. There is much public acceptance.

Ms Anderson also spoke about Long-term Transfers (see handouts):

- Takes 3-5 yrs. to implement

Water Right or Entitlement Transfer
- Permanent contract or defined term with renewal option

Dry Year Option Transfer
- Defined contract term with renewal option

Potential Risks
- Contract renewal
- Institutional approval process

There would be no change in water quality and minimal environmental impact. There is good public acceptance.

A question-and-answer period followed between stakeholders and District staff.

Mr. Molnar spoke about the Hybrid Strategies (see handouts):

- Baseline assumptions
- Minimize environmental impacts
- Maximize flexibility to meet changing demands
- Maximize local reliability
- Minimize cost
- Dry Period Yield of Strategies by Component

John Ryan discussed the Economic Analysis of the Hybrid Strategies (see handouts):

- Costing Assumptions
- Requirements of Economic Criteria
- Economic Evaluation
- Why is Time Value of Money Important?
- Preset Value Puts Outlays on a Common Basis
- Present Value of Strategies
- Estimated Community Costs
- Projected District Rates
- Projected Retail Bills
- Cumulative Flow Reductions

Mr. Ryan gave a summary of the Hybrid Strategy costs from 1997 to 2020 (see handouts) He talked about:

- Capital and Operating Costs by Component
- Present Value of Strategy Costs by Component (cumulative costs from 1997 to 2020)
- Percent Change in District Rates
- Percent Change in Retail Rates

A question-and-answer period followed between stakeholders and District staff.

Mr. Zigas gave a presentation on evaluation of strategies (see handouts):

1. Evaluation of the Strategies
    - Operational - Maximize Effective Use
    - Risk - Added "Maximum Responsiveness to Changing Conditions"
    - Economic -Minimize Rate Impacts
    - Community - Maximize Public Acceptance and Maximize Water Quality
    - Environmental - Minimize Impacts to Habitat

2. Maximize Effective Use
3. Maximize Response to Changing Conditions
4. Minimize Rate Impacts
5. Maximize Public Acceptance
6. Maximize Water Quality
7. Minimize Impacts to Habitat

The stakeholders were then separated into breakout groups to discuss a preferred strategy. The 3 issues to be discussed were:

1. What is the backup plan for drought?
2. How would it rate against criteria?
3. If not including components, why not?

After the stakeholders reconvened, each group spokesperson gave a summary of their group's discussions.

Mr. Fiedler asked the stakeholders if they liked the small group sessions. They said they did, and felt they had accomplished a great deal in that time period.

Mr. Fiedler wrapped up the meeting. The next external stakeholder meeting will be November 14. We will serve lunch at 11:30, and the meeting will be from 12:00 noon to 4:00 pm. He asked that the stakeholders bring ideas for a preferred strategy to the next meeting. We will present the final strategy to the Board in December 1996, and the Implementation Plan will start in the beginning of 1997.

The meeting adjourned at 12:00 noon.

Prepared by:

Monica L. Schefski
Administrative Secretary

External Stakeholders Meeting
September 9, 1996
Rinconada Water Treatment Plant

Component Questions

- Unit costs per component would be helpful
- Why are agricultural conservation savings only 1,000 AF?
- Does dilution + blending of recycled water improve quality?
  approx. 12 month retention period?
- Does recycled water in Anderson impact body contact?
- What are bromides?
- What are existing water contract amounts?
  SWP approx. 100,000
  CVP approx. 152,000
- Why is Anderson chosen for blending recycled water?
  Approx. Size + depth
- Is "unused water" "real" water?
- How large would Los Banos Grande be; what percentage would District get?
  LBG only 1 location alt.

Strategy Descriptions

- Are components in model feasible? How can you project for the next 25 years based on 75-year hydro period?
- How is yield range determined for reservoirs?
- In Strategy 3, if a reservoir gives 100,000, why do you need the other components?
- Is it realistic to consider stopping (annually) recycled water?
  Need coordination with end users.
- Objectives for San Jose recycling different than SCVWD
- What's the possibility of paying and benefiting for conserved water in other areas (conserving in one city and transferring that water to another)?

- Is there a more local banking opportunity which could give added benefits? Pajaro River area as example

- Wouldn't groundwater storage be preferable; why would we look at new reservoir? Which would have more impacts?

- What population base are we serving at build-out?

Costs Discussion

- Are rates reflecting strictly impacts on rates?
  What about hook up fees?

- Comment: Many Level 2 stakeholder breakout groups ranked costs close to last.
  Question: How is this affecting team thinking on strategies?

- Costs only reflect District's costs.
  No wastewater treatment costs.

- If there was less to treat, it would cost less.

- Component costs would help in creating new strategies.

Screening

Comment on rating of recycled water quality: Not as risky as portrayed in the ratings

Lessons Learned

- Keep an open agenda item for introduced topics.

- Additional de-brief after breakout groups.

Eric and John Ryan's Group

Contingencies

- Near term ... pricing to reduce demand
  - Could lead to education on value of water... pay for increased security.
  - Connection fees v. user fees.

- Conservation level 2 as fall back

- Test banking - use in future

- Policy to expand/test the market for recycled water...agriculture?

Strategy

- Since level 2 conservation includes level 1, level 1 is a given.
- Uncertainty on banking...wait for existing semi-tropic banked event to occur...test existing program, but use transfer options first.
- Non-potable recycling at 32 KAF

Why not some of the other components?

- Indirect potable is expensive
- Reservoir
  Environmental
  Public acceptance
  cost
  Institutional barriers easier with banking unless we buy into a project.

2nd Group (Joan and Amy)

Components for Strategy

- Least cost, easy components first
- Conservation program 1 (implement first)
- District should accept San Jose
  Will have to implement some recycling - will know more in 3 years
- Include non-potable recycling as an easily implemented component.
- Potable/reservoir - have too large a commitment in cost/infrastructure
- Use transfers/banking to fill balance
- Could look at another chunk of non-potable - but very costly
  Use as potential contingency.

Strategy

1.	Conservation program 1	11,000 AF
2.	Non-potable rec.	6,000 AF
3.	Transfers	
4.	Banking	

Contingency

- Additional non-potable hinging on San Jose decisions

- Ratings would closely follow strategy 2; Some imp.

- Rates rating could drop

- In-county reservoir not a consideration - environment.

Bill's Group

- Banking @ 30TAF
- Long-term transfers @ 30TAF
- Demand Management @ 18TAF
    - Long-term transfers
    - Indirect Potable Reuse
    - Reservoir ? (group was divided here) -- not enough info.

- Strategy 2 - evaluation OK
  - add recycling
    non-potable
    indirect

- Combination of 2 and 3

- *Increase conservation - as an option - by ordinances - may not get to level 2*

- ~~No~~ surface storage - divided on as an option

- Maximize flexibility

Evaluations

- No risk in treatment failure for water - or recycling

- Evaluations OK

Strategy

- Conservation 2
- Recycled water - non-potable - indirect portable
- Banking
- Long-term transfers

Group Debrief

- More interaction in groups was good
- Economics is confusing to use inflated/PW $
- Stakeholders very good - keep up level of understanding
- Sending less material resulted in more flipping through of material - keeping pace
- Tough balance to be reached in streamlining material
- Heard good things about economics.
- Evaluation graphics very clear
- Charts showing lead time would be helpful
- Break-outs needed to talk more on cost/quantity
- Offers of outreach should be more organized
- Comment heard: Materials from last meeting led to believe certain decisions already made
- Many distractions/noise
- Use of lingo by staff
- Successful in hearing and being heard by Level 1 Group
- Stakeholders taking hold of easy options; finding more difficult options hard to grasp.

SANTA CLARA VALLEY WATER DISTRICT
INTEGRATED WATER RESOURCES PLAN (IWRP)

SUMMARY OF MEETING WITH EXTERNAL STAKEHOLDERS
November 14, 1996
RINCONADA WATER TREATMENT PLANT

Note: The items recorded on the flipcharts during the meeting are provided as an attachment to these minutes. Please refer to them where indicated.

The meeting commenced at 1 p.m.

Jim Fiedler welcomed everyone.

Stakeholders in attendance were:

Interest Category	Representative	Agency
Academic Community	Professor Burton V. Dean	SJSU
Agricultural Users	Nancy Richardson	Farm Bureau
Business Community	James Tucker	San Jose Chamber of Commerce
	Elizabeth Zimmermann	Santa Clara Valley Manufacturing Group
	Connie Martinez	Joint Venture Silicon Valley
County Planning	Leode Franklin	Santa Clara County Parks & Recreation, SC Co.
District Flood Control	Dean Chamberlin	Central/North Central Flood Control Zone
	Suellen Rowlison	South Flood Control Zone
District Landscape	Doug Nakamura	Northwest Landscape Maint. Company
Environmental Groups	Julia Bott	Sierra Club
	Craig Breon	Santa Clara Valley Audubon Society
Homeowners	Roald Alexander	United Neighborhoods of Santa Clara County
Other Water Agencies	Steve Ritchie	San Francisco Public Utilities Commission
	Art Jensen	SF Bay Area Water Users Assn.
Public Advocacy Groups	Marcia Allen	League of Women Voters
Water Recycling	Lou Garcia	City of San Jose
Water Retailers	Lorrie Gervin	City of San Jose Municipal Water System
	Scott Yoo	San Jose Water Company

Stakeholder not in attendance was Peter Van Dyke. Alternates not in attendance were Fred Angelino and Paul Romero.

District Board members in attendance were James Lenihan, Rosemary Kamei, Bob Gross and Larry Wilson.

Staff present from the District were Scott Akin, Belinda Allen, Wendy Ellyn, Jim Fiedler, Barbara Judd, Bill Molnar, Alison Russell, John Ryan, Jack Sutcliffe, Stan Williams, Ray Wong and Lindy Minch.

Eric Zigas and Joan Ryan were present from EDAW.

1. Project Status Report

Jim Fiedler began the meeting by reviewing the agenda. He described the objectives for the day as two-fold: to receive comments and input from the stakeholders on the draft report in particular, on the Preferred Strategy and the report's conclusions and recommendations, to get some feedback from the stakeholders and a reflection of how the document reflects on the feedback we have heard over the last few months; and to solicit a recommendation from the stakeholders and inquire as to whether the stakeholder would feel compelled to recommend to the Board as the Level 1 Stakeholders that our Board accept this report and the Preferred Strategy.

In addition Mr. Fiedler explained that he would discuss the role of the stakeholders in the implementation of the IWRP. There has been some expression from the stakeholders to continue in this process. In addition the meeting would conclude with an evaluation from the stakeholders as to what has worked and what recommended changes and lessons learned from this process can be applied to subsequent programs.

The flip chart notes from the October 29 stakeholder meeting with the Board were reviewed.

Mr. Fiedler then reviewed the draft report and how it incorporates the previous work reviewed by the stakeholders.

Alison Russell announced that a public meeting would be hold on Wednesday, November 20 from 7 - 9 p.m. at the District office. She also described the publicity for the meeting.

Mr. Fiedler encouraged the stakeholders to provide comments to staff by fax at (408)264-0213 by November 20. Mr. Fiedler also announced that there are two Board meetings planned, on November 26 to report back on this meeting and Tuesday, December 10 for Board action on their acceptance of this document.

In response to a question Mr. Fiedler explained that the intended Board action is the Board's acceptance of the staff report and the recommendation contained within.

2. Presentation and Discussion of the Preferred Strategy

Mr. Fiedler presented an overview of the Preferred Strategy and the role of the core elements. The bulk of today's presentation will resolve around chapters 10 and 11 in the report. He described that the Board requested that staff prepare a long-term road map for the District and the county and a short-term blue print to achieve water supply reliability.

Mr. Fiedler explained shortage levels, banking, transfers, conservation, core elements as contained in the report.

In response to a question Mr. Fiedler explained that the critical dry period is an extended year drought and staff assumption is that should the County have no water shortages we will pursue the core elements. However, staff foresees that the County will have shortages, so the Water District will move ahead with the intermediate program. The District will secure water banking, promote the infilling of nonpotable water recycling and secure demand management and water transfers. Staff are not solving the entire problem initially, but we are dealing with trying to satisfy an expected near term demand during the critical dry period. This allows the District to revisit over time this maximum action plan.

Discussion of critical dry year and maximum action plan ensued.

Eric Zigas explained the Preferred Strategy rating against the evaluation criteria and compared its rating to the 4 Hybrid Strategies.

John Ryan discussed the economic analysis of the Preferred Strategy.

In response to a question Mr. Ryan responded that the cost could appear to stack the numbers against water recycling, yet someone has to pay them. They could be taken be out of the District side and put onto the community side. The total number will still be the same.

Lou Garcia commented that this is the point I have raised several times is the way you do these numbers is you make a comparison between what it cost per acre foot for nonpotable recycling compared to the other alternatives and you make the assumption that the District is going to pay that full cost and that is a skewed analysis. It assumes that the District will pay that and it assumes that the water recycling agencies, the POTWs would have no contribution to that. So it really gets away from looking at the ultimate rate payer, who pays both water and sewer. It makes nonpotable recycling look more expensive than it really is. This is about the 5th time I've said this in this group, and it's the last time I will say it.

Mr. Ryan replied that it makes it look more expensive to the water rate payer than it might turn out to be.

Mr. Garcia responded: I will have to accept that assumption that this is your process and you are only worried about the water rate payer. But there are some of us who worry about the sewer payer and a lot of people who are worried about people who pay both of them.

Discussion ensued on water conservation and incentives to conserve water.

Mr. Garcia commented: There are two issues here. One is the whole issues of incentive and disincentive, and it relates to businesses, individuals as well as between communities. If Company A does water conservation and Company B doesn't, and there is a drought, they shouldn't be treated equally. The same is true with communities. If Sunnyvale does a bangup job of recycling and Santa Clara doesn't, they shouldn't be treated the same. This is the same problem we have with the Hetch Hetchy policy regarding conservation use it or loose it kind of policy.

The second thing is we have a countywide sharing of responsibility. We subsidize water rates to agriculture and its the urban dweller that subsidizes that. That is a good social policy, and it should continue. It probably ought to be more explicit. The same holds true with recycled water. The more recycled water we create that is available for nonpotable uses, the less water that has to be imported, whether it is a critical dry period or not. So that's a burden which is helpful to people who don't have recycling in their community for us to recycle. We have the west valley cities now paying $6 million or more for their share of the recycling project, but they're never going to see an ounce of that water in their communities. But it helps them because it protects the capacity of the plant.

A discussion ensued on costs of recycling water.

3. Presentation and Discussion of Contingency Actions and Triggers

Scott Akin described chapter 11 of the report.

4. Stakeholder Recommendations to Board

Mr. Fiedler asked the stakeholders two questions:

1. Does the Preferred Strategy contained in the Draft IWRP Report meet the project planning objectives, and reflect the feedback stakeholders have given over the course of the IWRP process?
2. After reviewing the draft report, would the stakeholders recommend that the Board accept it and the Preferred Strategy?

Mr. Garcia discusses his reasons for not supporting the document.

Scott Yoo asked whether Mr. Garcia thought the economic considerations are not enough to throw more resources at the nonpotable reuse, the fact that we might consider cost sharing. One reason why it hasn't been that attractive to me, is the cost of it. Are you saying that we need to consider the other community benefits maybe above the cost or do you think that we crank the numbers into what the POTWs are going to spend on this we might make it attractive enough to use a bigger chunk.

Mr. Garcia responded: To me money is not the issue here, it's basic policy issues. It may well be that the rest of you want to support a no-growth policy. The question becomes one of how cost are shared, and I don't think that is a major roadblock.

Art Jensen asked: What would happen to your situation if you looked at your recycling needs as a black box water supply development project, and you came to the District and said, "We'd like to buy water for $280/AF", and then you put that in your table. I'm not trying to recommend a price, I'm just putting the concept out there.

Mr. Garcia responded that the proposal that appealed to me is the one called Hybrid Strategy One.

Mr. Fiedler asked should the District partner, or otherwise develop a relationship with others whereby the cost born by the District is such that it is equivalent or compatible with the other component costs. The report could then read that there would then be an opportunity to invest or have a yield far greater than 6,000 AF additional of nonpotable recycling.

Mr. Garcia responded that is starting to get there, but I would be more comfortable is as an objective to have the most cost effective strategy from the perspective of the end user and rate payer. That is something we would work towards, so you're looking for those solutions for the bottom line, whether it's business or residential. Basically if you add up everything they pay every month is the most cost effective to achieve the objective that we are trying to achieve.

Stan Williams responded: This is a weighty matter and there is another group that the Water District works with and isn't represented in this group and that is the Water Commission, and it's made up of representatives from each of the cities and the County. In discussing the progress of this particular project with that committee, one of the issues they picked up on is the question of the relationship of water and land use planning, and what was raised at some of the stakeholder meetings and what was the District's response.

The comment I ended up with was the answer that we just provide the water to accommodate the general plan is not enough and is not the answer that the cities are looking for. It's more, yes, but you have to tell us what that means, because that could have great cost associated with it, it could have other impacts. So just to say, plan your community and we will provide the water isn't enough information, we don't want you to tell us how limit our growth or land use, but tell us the implications or ramifications if we plan differently. I think you are hitting this area with this discussion because I don't think that any of the objectives that you have worked with address the issue that Mr. Garcia is raising. That is that at least a segment of the county where this decision on this issue has an impact that is different that what you evaluated because it is related to another issue. It's almost like different criterium to put on top of the process and say given this is the rational way to do it we have another issue that affects the outcome and we ought to look at it. I'm not sure that all the cities in the community will react the same way. I think we have will have different opinions as to who pays. Should the entire county pay for this issue or should just a portion of the county? How do you pool and how do you distribute the benefits and the cost. I don't think anything we have devised really attacks it. You can't just lay out the alternatives in this scenario and say if we just tweak this one a little, it will now answer this question also. It's almost a question you have to say that has to be looked at on top of all this information and it's a different issue that is related. I don't think that the evaluation process that you have all been through can answer this.

Mr. Fiedler asked: What do the stakeholders feel is an appropriate role for the District - we looked at the water supply issues and benefits, essentially not community wide wastewater disposal. What should we have as a statement or an role in the overall community, not just water supply, but growth and waste disposal. What should the role of the District be?

Leode Franklin comments: I think it does affect it regionally and we should look to issues from a regional perspective and cooperative perspective and those kinds of changes that come up, I assumed were part of the flexibility in the plan that suddenly the San Jose situation and what it might do to the entire community, I think the Water District does have a responsibility to look at that if they can be part of the solution.

Mr. Fiedler replied: I recall Mr. Garcia making a presentation to the Board that the City would not be going ahead with Phase II or additional water recycling. It is a volatile situation. Obviously, the results of the summer time indicate otherwise.

Mr. Garcia responded: I never said that. What I said was that San Jose does not intent to go forward with Phase II project that is in our current permit. We are going to come in with a different Phase II that will include substantial water recycling and probably a lot of other environmental type enhancements that will deal with the problem. We are working on that now. We are designing additional pipelines that we have to get funded, so we can move more water. We can't move it if we don't have the customers, and if there isn't a partnership with the District. We can move it if someone can take it - one of the other things we are looking at is exporting it to Alameda County. If we could export it to Alameda County, which is closer to the plant than to some of the places we are bringing it back to, then that could be an alternative. Right now there isn't cooperation and I don't know from the public policy standpoint if that would be good and I don't think it would be politically very smart to tell people you are going to pay your overall water and sewer bills are going to be higher because we are going to send this water somewhere else when we could be using it in the county. Those are the kinds of things that come up. I never said we weren't going to do more water recycling, what I said is we have a permit that says we are going to build this project in 2 phases, and the second phase required us to put a pipeline in every street in San Jose to get more and more water into smaller parcels - it was not cost effective.

It is more cost effective to run pipelines to agricultural users where their top crops can tolerate the water, and kill two birds with one stone. The bottom line is we have to either move a lot more water or get the Regional Board to say, it doesn't matter, you can put as much water in the Bay. Or the dreaded "M" word.

Discussion ensued on future studies covered in report.

Mr. Garcia commented that we can recycle the water, the questions is, "Do we have a customer?" Craig raised the issue on time.

Elizabeth Zimmermann commented: I don't know where you draw the line on which community's considerations are proper to consider for the process, but I certainly see this one as one tied in more closely with the water supply reliability . You can produce all the water you want, but if 1/3 of the county can't discharge it, it doesn't matter how cheap it is. I think that is what Mr. Garcia is getting at, and certainly we are impacted by that.

Mr. Fiedler replied: Remember that we have in place water supply for average to wet conditions, it is really that critical dry period where we are really focusing our attention.

Craig Breon commented on other issues he thought should be addressed like outstanding policy issues, unstated no-growth policy for portion of community, minimize environmental impacts. He believes the current policy is an unstated pro-growth policy.

Discussion of change of recycling business ensued.

Mr. Garcia responded: Things have not changed. The requirement has been there and continues to be there. What's changed is that we are in the water recycling business, which we did not intend to be in. The dilemma we have is we have to deliver this project, but it's not going to get us to where we need to be. That gets us back to the other issue that we shouldn't be talking about. If I had my preference I would say let's adopt as a recommendation to the Board the Hybrid Strategy One.

That's the one we identified would have the least impact on the environment. If I could go into the Regional Board meeting in December and say the Water District has adopted this policy which says we are going to get 35,000 more AF on top of 14,000AF, we'd be home free. We'd just have to figure out to get it there and how to pay for it.

Marsha Allen commented: What's going on here is exactly the kind of thing you see all over the county. That basically, very large planning decisions are being made in very small pieces.

Art Jensen: "Perhaps if the preferred strategy included another step, another element? If one of the core elements would be to study the issue of distribution, benefits, and costs associated with recycled water. I think that is important to this discussion and the stakeholders. Clearly, there are local benefits in terms of reduced impacts to the community. There is a local benefit regarding water supply and there are any number of models for how to deal with the same situation, that take the discussion away from what is the right thing to do arguing philosophy. There are other models to use, so I encourage you to have that as a core element in this to explore opportunities for expanded recycled water to resolve the problem..."

Mr. Zigas: We thought it might wise to review where we have been with today's discussion. We would like to get some guidance from you as a group can recommend this report either the way it is or with some future qualifications. Mr. Zigas then reviewed the flipchart notes with the stakeholders.

Discussion, suggestions, recommendations follow.

Stakeholders individually commented that they could support the preferred strategy with today's discussion incorporated into the final report. A summary of their comments is shown on the attached flip chart notes.

Art Jensen was selected to be the spokesperson for the stakeholders at the December 10 Board meeting.

5. The Role of the Stakeholders during IWRP Implementation

The stakeholders expressed the desire to continue participation during the implementation of the IWRP. There was support for a followup meeting by April 1997 to review project status, particularly with regard to the water recycling issues discussed today.

6. Stakeholder Evaluation of the IWRP Process

The stakeholders provided an appraisal of the process. Their comments are recorded on the attached flip charts notes. The stakeholders believed that the process has been worthwhile.

7. Summary

Mr. Fiedler thanked the stakeholders for their participation and acknowledge the staff present for their efforts.

Jim Lenihan commented on the value he saw in the process and product of the IWRP and thanked the stakeholders for their participation.

Meeting adjourned at 4:15 p.m.

External Stakeholder Meeting
November 14, 1996

Stakeholder Questions and Comments during Preferred Strategy Presentation

- Recycling cost assumptions need further review and description.
  - need to discuss further in report as to how costs may be impacted (due to current assumption that all costs would be borne by the District).
- The assumptions for equality to end users in terms of planning objective #1 need to be outlined in the report.
- The District needs to address the pooling of costs and benefits further within the Report.
- The Report may need a discussion of sewer rates.
- Community costs only include those from conservation (District explanation).
- The assumption that the water utility would bear all recycled costs is not accurate. The Report needs to address this issue, in particular a footnote should be placed at the bottom of cost table showing the preferred strategy outlining the result of potential cost sharing among the District and the City of San Jose or other agencies.
- Future updates will likely bare out more information on quantity/costs regarding more definition for water recycling.
- The District should outline further detail on the use of incentives and disincentives.
- Keying responsibility of communities to ABAG demands is important
  - the result of exceeding the District's growth projections (based on ABAG) needs to be clear to communities
- What is the range of costs that could be expected if a cost sharing arrangement was implemented between the District and recycled water providers?
- Would such a footnote be appropriate for any other components?
  for example: Reservoir--opportunities for cost sharing that would have brought District costs down?
- Other triggers not mentioned could include: 1) a breakthrough in desalination technology that would bring costs down; and 2) an earthquake which results in a major failure in distribution system.
- How far has the District gone in terms of "next steps"? any studies planned, etc?

- What type of environmental documentation would be required for the preferred strategy?
- I would like the District to further explore the notion of selling conserved water in future updates of the preferred strategy; other key areas for future study should be included in Report.
- One stakeholder requested the rewording of a comment in the Report on Hetch-Hetchy to be reworded in a more positive manner; (staff acknowledged location of comment).
- The table on community costs needs to address the issues with equality. Community costs are not necessarily only inherent with the conservation component. Equal reliability of service and everyone sharing hardship equally at the local level should be discussed.

Stakeholder Reaction to the Report

- Ideas of cost-sharing were not reflected.
- Contingency actions should again be reviewed by stakeholders (in future updates).
- Where will the Board/Stakeholder discussion from October 29 be reflected?
- Good job of developing a rational, flexible plan reflecting potential for change.
- I generally agree with the chosen components
- Recycling should be more prominent (non-potable) as viewed by POTWs.
- Plan will curtail growth, due to infrastructure constraints and outflows; the results of the plan are akin to a building moratorium in San Jose and some other cities.
- What would the trigger be that we would see additional non-potable included in the plan?
    - partnering/cost sharing?
    - most cost effective strategy from ratepayers viewpoint (water and sewer)
- The non-potable recycling issues is not reflected well by the 15 objectives and may need to be looked at as an additional parallel issue.
- The District needs to acknowledge the limitations of the Study-- and that the economic factors may not have been looked at in totality; but there are limits to any study.
- What action would the Board have to take to acknowledge the City of San Jose, et. al. (Palo Alto, etc.) and their special needs?

- I thought we were assuming more than 20,000 acre-feet (14,000 core actions plus 6,000 in preferred strategy) for non-potable recycling?
- Currently the City of San Jose is over the 120 mgd mark by 13 mgd (at 133 mgd).
- The District should look at problems regionally; there is some responsibility there.
- The City of San Jose and other recycled water providers cannot move water without customers; they need a partnership with the District.
- June 1997 City of San Jose must return to the Regional Board with a proposal.
- Water and discharge issues are tied together much more closely than earlier assumed.
- A core element should be added to direct the District to: Study the regional benefits associated with addressing discharge issues.
- Staff needs to recommend to Board to engage in discussion with the POTWs.
- For some, the Plan is an unstated no growth policy for some areas of the County; for other representatives the plan is pro-growth without acknowledging there is a limit to water as a resource.
- How would the District reflect any proposal (by San Jose or others) presented to the Regional Water Quality Control Board(RWQCB) in June 1997?
- The preference ("fantasy") is Hybrid Strategy 1. (L. Garcia)
- Large planning decisions throughout the County are made in small pieces.

Stakeholder Conclusions

1) Agree with recommendation with added statement on corollary issues discussed today.

2) Support with added comments from today.

3) We have been given good information, good effort. We have heard some discussion today which should be recognized. Unfortunate that there was only one combined meeting with the Board. Flood control was scarcely mentioned. We were given excellent resource material, compliment District on effort.

4) The plan is workable for the agricultural sector; would support more non-potable recycling investigations.

5) Would support; maintain regional approach.

6) Need to maintain flexibility, I support it.

7) Pass

8) Support with modifications as per today/ Maintain continuation of process in further updates.

9) Recommend based on inclusion of issues today; carry forward to the Board.

10) Support, but maintain flexibility; I may send separate policy letter.

11) Good open discussion of process, may send side letter to the Board.

12) Support with clarifying statements based on today's discussion.

13) Supportable

14) Supportable

15) Support it.

16) Support; would also like to receive copy of Board Package.
(Staff committed to including the External Stakeholders in the December 5th mailing to the Board on the Preferred Strategy and External Stakeholder recommendations).

17) The real work is in following the implementation. I would support and may send letter.

18) Support with today's discussions.

Comments on Improving Public Participation Process/Stakeholders in Future

1) Would be better to have full day meetings

2) good, open process, meetings seemed too far apart.

3) good job

4) breakout sessions were very good

5) I would have recommended meeting more often.

6) increase the public information effort

7) good process, there was a good use of time and high productivity; staff produced good analysis, and provded good support with strong project management.

8) good, open process. Consultants and staff appeared to make a good combination.

9) flexibility/ability for change was good in process.

10) process was good

11) Some questions from previous meeting did not always get fully answered before moving on to next section, for example what an element/component contained.
    - there appeared to be some question as to whether the group was representative of the District, since many opinions at August 5 workshop appeared to be contrary to that of stakeholders, especially those of cost.
    - In the future, the District may want to verify attitudes with polling.
    - It was good to meet with the same group to build on the rapport and knowledge base of the group.
    - We should meet again in April, and at least annually.

12) left meeting before feedback session

13) It was a good job; looked forward to meetings.

14) Would like to meet regularly, staff's responsiveness was good.

15) No additional comments.

16) The open process was good; more outside input would have been beneficial, agree with the idea of a District survey; the wide variety of backgrounds resulted in a steep learning curve, but time was efficiently used.

17) I appreciated the meeting with the Board.

18) The District staff managed an aggressive agenda with limited time.

Key to Stakeholders

1) Doug Nakamura
2) Leode Franklin
3) Dean Chamberlin
4) Nancy Richardson
5) Lori Gervin
6) Scott Yoo
7) Stan Williams
8) Burton Dean
9) Art Jenson
10) Steve Ritchie
11) Craig Breon
12) Lou Garcia
13) Jim Tucker
14) Rould Alexander
15) Suellen Rowlison
16) Marcia Allen
17) Julia Bott
18) Elizabeth Zimmerman

Board of Directors/External Stakeholder Meeting

October 29, 1996

Expectations for the Day

- Honest discussion about the components
- Information exchange
- Affirmation that the External Stakeholder process will be considered in the Preferred Strategy
- What has the Board learned from the process?
- The Board will be willing to answer:
    - how specific is the IWRP expected to be?
    - how will the Board weigh input?
- What are Board member expectations & preferences?
- What are the Board's goals for the IWRP?
- Receive input from the Board and Stakeholders
- "Menu" of components from the Stakeholders for the IWRP
- Trade ideas and thoughts
- Factual exchange of information

Issues for Discussion among Board and Stakeholders

- Assurance that Imported supplies will continue to be made available to SCVWD
- Recycled water
    - non-potable
    - Indirect potable costs
- Pros & Cons of off-stream storage
- Relationship of IWRP to:
    - growth
    - SCVWD Environmental Policy

- IWRP schedule ambitious
- Demand estimate/range
- Costs
- Process for periodic review of the IWRP and community involvement.

Discussion of Issues

Comments made represented by the following: (*b*) board member (*s*) stakeholder

b • A large amount of time and effort is currently being expended in the review of storage options available to the District.

b • The termination date of existing imported water contracts is long-term, some expire in the year 2008.

b • There is potential to re-negotiate imported water contracts next year; this renegotiation would involve the terms of the contract though, not the quantity of supplies.

b • Water which has flowed past the District uncaptured has reached levels of up to 80,000 ac-ft during some wet years; this water could become additional supply for the District through the development of additional storage.

s • There are other ways to accomplish storage other than through the development of reservoirs which typically have higher costs and environmental impacts.

s • Stakeholders also opposed surface storage due to public opinion as well as the high costs and environmental impacts.

s • Cost analysis of surface vs. groundwater storage in terms of all costs would be beneficial for decision-making.

s • Environmental issues may have been over-represented during the process.

b • All resource options should be kept open for the long-term.

s • The District may want to hold a reservoir as a potential future option.

b • An off-stream reservoir should be very carefully studied.

s • Reservoirs may become the "white elephants" of the future; instead we need to focus on water marketing options.

- *s* All of the stakeholder groups left off a reservoir/off-stream storage from their preferred mix of components based on timing, permitting and the stated objectives; we couldn't build a case for a reservoir within a 2020 timeframe.

- *s* A reservoir should be kept on as a potential longer-term option.

- *s* The issues facing the District are: 1) how priorities are set and 2) what resources the District should initially focus on.

- *s* In-stream storage (in-County) was discussed, but dismissed primarily due to two factors: 1) some stakeholders believe that demands are overstated; and 2) the high costs associated with that option.

- *s* Costs for in-stream storage were not shown to be more cost-effective.

- *s* Other alternatives were found much more viable.

- *s* Owner/operator benefits of a reservoir would be attractive.
- *b* Continuing process for the study of a dam would be the ultimate protection for the District's long-term future.

- *s* 30+ years is beyond the scope of our study.

- *s* Due to the soft demands other options offer greater flexibility.

- *s* We have skirted most elements of the growth issue to keep from halting the process.

- *s* It would be appropriate to convey to the cities within the District the amount of water which would be available to them based on future water supply plans and the cost of obtaining additional quantities beyond that level.

- *s* The wide demand range was in large part the reason for not selecting a reservoir within the preferred mix.

- *s* The stakeholders found that it was not difficult to come up with the quantity of water needed for the stated objectives for dry years.

- *s* The probability for experiencing critical dry years influenced decision-making; some stakeholders felt that in those cases rationing could still be used as a fall-back position for a portion of the short-fall.

- *b* Growth will occur (especially in South County) differently that what some believe.

- *b* Keeping off-stream storage the table could put the District behind the curve in terms of meeting demands.

- *s* Incremental steps can be taken to maintain flexibility while embarking on a long-term contingency plan (60-75 years).
- *s* The softness of demands is perceived due to the comparison of existing water use versus pre-drought water use (existing water use is lower despite growth) due to conservation.
- *s* It is difficult to analyze the downturn in water use due to the variety of contributing factors. However, it is likely the conservation ethic is likely to continue.
- *s* In the survey completed by the San Jose Water Company, cost was shown as very important to its customers- many customers believe that the focus for the District should be on minimizing costs.
- *s* It was found during the course of the IWRP that the projects of the District regarding recycling projects did not concur with that of the POTWs.
- *s* Constraints on outflow for the City of San Jose (120 mgd) initiated the reclamation issue.
- *s* Currently the City of San Jose is 13 mgd (133-120 mgd) over the allotted outflow to the Bay.
- *s* The 120 mgd outflow target will affect short-term water demands; the City must recycle to avoid a moratorium on growth.
- *s* The District's recycling estimates do not include options for agricultural use. In addition other issues such as 1) cost sharing to beneficiaries; and 2) disincentives to recycling (such as those within the Hetch-Hetchy contracts) must be reviewed carefully.
- *s* Indirect potable reuse has some hurdles to overcome in terms of public opinion; public opinion can change through education.
- *b* What is meant by 72,000 ac-ft is available for recycling?
- *s* This quantity includes approximately 37,000 ac-ft which could be sold from the City of San Jose and other cities within the District which could provide the remainder of recycled water. The main issue is finding buyers for the recycled water.
- *s* South County Agricultural Use is approximately 20,000-25,000 ac-ft. The market for recycled water in agriculture would be much less and all crops would not be tolerant of such a supply. there is a large potential for recycled water as a source of supply including municipal and agricultural uses; however a market is needed. Sunnyvale could be easily integrated with the City of San Jose system for distributing recycled water.

s • There are presently wholesale/retail disincentives toward conservation/reclamation in terms of dry-year shortages and the calculation of contracted supplies. When dry-year supplies are based upon a percentage of use in previous years, the implementation of conservation and reclamation (which reduce water use) serve as a disincentive by actually reducing dry year supplies. The solution is to provide shortage provisions based upon water budgets. (Art **then posed a question to the Board, Jim/Scott please add in additional info if you recall: The question to the Board is "Would the District prefer to see retailers responsible for individual conservation/reclamation projects based on local situations or do you believe retailers should be responsible for the same percentage of conservation accross the board?")**

Closing Statements and Comments

b • Is it a liability to have too many options open? The "menu" concept seems attractive.

s • Flexibility in the number of options should ensure the District's success.

s • The future of imported water appears secure for the District. The focus should be on the financing of resources which will become increasingly difficult.

b • The Board of Supervisors discussed the IWRP this morning as well . The feedback the Board has been hearing is that the process has been successful. They also discussed the issue of flows and water quality of the District.

b • The District is fortunate in finding that we have more options available than we need.

s • I appreciate the process and the participation of a broader set of retailers.

b • I think we have a fuller understanding of the POTW issues and constraints on growth.

s • I have realized that the job of the stakeholders was to convey to the Board why we came up with our conclusions, and assure the Board that all components were considered.

b • I hope that the stakeholders will stay involved; the recycling issue and that of outflows to the Bay will not go away.

s • I have been flabbergasted at the degree of work by staff, and the work that has been to keep stakeholders effectively on track.

b • Potable reuse with a secondary site is critical--we may be mandated to use recycled water.
s • I would definitely value continued participation as a stakeholder in the future.

APPENDIX C
LEVEL 2 STAKEHOLDER FORUM

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LEVEL 2 STAKEHOLDER FORUM

This appendix contains a record of the August 5, 1996 forum held with Level 2 IWRP stakeholders. Forum participants were invited from community, business, environmental, civic, and cultural groups. A summary of the forum is followed by a detailed narrative of the day's activities and participant's comments.

SCVWD Integrated Water Resources Planning Project

Level 2 External Stakeholder
Public Forum
Santa Clara Convention Center
August 5, 1996

The day consisted of four (4) exercises (and one presentation), conducted within eight (8) facilitated breakout groups (see the attached agenda). Each of the exercises (not including the presentation) are summarized in the following pages, followed by the detailed notes taken by each facilitator. The facilitated groups were designated by a color (green, red and blue) and an assigned table (A, B or C). The detailed notes are presented by facilitated group (i.e. *Green A* shown off to the right).

EXERCISE 1
EXPECTATIONS

The breakout group participants were asked to introduce themselves and to share why they were there and what they each hoped to gain from the day. Key words that were discussed and introduced included:

- Costs and water pricing
- Tradeoffs and how they are made
- Alternative sources of supply
- Reliability of supply
- Water quality
- Lifestyle
- Water supply planning as it relates to Growth -- assumptions of providing water despite growth -- land use versus water policy
- How So. Bay relates to the State as a whole ... Bay-Delta
- Non-point source
- The role of recycled water
- Sustainability in supply as related to the Environment
- The role of Conservation

Notes from each breakout group follow:

Green A

- Become aware of District happenings
- Supply reliability
- Water quality concerns
- Become more aware of District's direction
- Pesticides
- Maintain quality lifestyle.

Green B

- Reliable water supply source
  - in times of less rainfall
  - wants reservoir
  - contingency factors (flexibility)

- Cost for water supply
  - what are the trade-offs?
  - what are the environmental costs?
  - who bears the brunt of flooding by outside County reservoirs?

- District should integrate the full water system and impacts on community.
  - growth including effects from bringing water in
  - recycling effluent should be a strong consideration.

- Good quality water
  - How water company can work with public together to improve.

- Conservation
  - How public can work with District

- How university can meet its mission?

- What are the alternative sources of water?

- Environmental effects on streams and the Bay

Green C

- Reclaim wastewater
- Solving shortages
  - Conservation
  - Enforcement of laws/rules

- Recreation access to watershed lands
- Water quality protection, conservation and $ savings
- Balanced approach - equitable
- Learn about water policy and planning
- Protection and conservation of fisheries and other natural resources.

Red A

- Success in identifying major concerns
- Come up with some priorities to help guide District
- Observing and participating in this open process
- Challenge water district's assumptions of providing water despite growth
- Sustainability in water supply as related to environment
- Importance of developing solution for agriculture water needs
- Understanding of trade-offs:
    - industrial
    - residential
    - agricultural
    - cost "versus" reliability

Red B

- Interest in process and how priorities sift out
- Wastewater process and reliability of domestic supply
- Supply, quality, enough to meet future needs
- Understand planning process, water recycling, sustainable development plan and integration of these with San Jose's plans
- Understand District's perspective of the program to identify how company and people can participate in it.

Red C

- Board to have more influence with planning County commissions - limit expansion
- Limit County growth
  - too much consumption of resources.
- Water District should better reflect the needs of the community - not self-perpetuating
- Develop values to reflect the Western environment.
- Policy to not support more dams - consider Delta and Estuary in planning process
- San Jose is developing beyond its sustainable limits
- City departments should stop depending on continuous buildings/build-outs.
- County and cities should develop "sustainability" programs
- Water available to meet your community's demand
- Wants to see water used wisely and creatively
- Wants to see well-managed growth.

Blue A

- What's involved in water supply planning with regard to growth
- District's role in growth
- Understanding of how NPS issues are integrated into IRP process
- How South Bay addresses water issues for State as a whole - Bay Delta ... how myopic we're being

- How recycled water fits into water supply planning.

- Potential impacts to PG&E and agricultural customers
- How water quality and water pricing are addressed.

Blue B

- Transportation, reclaimed water, $ financial sense
  - water quality for spotting and cleanliness
- Find out what the issues are
- Providing customers with water, a variety of needs
- Neighborhood associations, interested in everything that happens with water. Communications - water
- Industry, what it has to expect - balance conservation/waste reduction
- In stream flows, riparian habitat
- Well concerns, offsetting Semitropical costs.

EXERCISE 2
OBJECTIVES

After a round of "water supply pictionary," the breakout group participants were asked to define an objective (that was provided to them by the facilitator) and to share the definition with the group Key words that were discussed and introduced included:

Operation

- Flexibility
- Efficiency
- Balance (supply/quality versus ecosystem)
- "Management and movement of water to meet supply and demand consistent with financial constraints, conservation & reuse and environmental protection & enhancements."
- Quantity, quality and price

Economic

- Allocating resources fairly
- A "value-added" service to the users
- Commodity
- Ability to pay
- Benefit
- Return

Risk

- Contaminated water
- Failure of quality
- Water supply adequacy
- Drought -- want water at all times
- Facility failure

- Measure of uncertainty
- Subsidence

Community

- Unawareness of the value of water
- Widespread education
- Users, customers AND the environment
- Quality of life

Environment

- The Delta
- Balance
- Sustainability
- Let the environment do the work

The following definitions were provided for the planning objective category:
OPERATION

Green A

- Planning and Implementation (quality of)
- Supervision/Program/Services
- Coordination/Agencies
- Flexibility

Green B

- Group of processes needed to produce a result, as in the purchasing and delivery of water.
- Examples; flood control, maintenance of systems, treatment of water, assurance of clean ground water.

Green C

- Public involvement
- How something is accomplished ...
- Management of existing systems
- Active Participation
- Disbursement/Distribution of water
- Compliance with existing regulations.

Red A

Process by which water is acquired, stored, and delivered ... and by which the District gets paid!

Red B

- Factors responsible for delivery of quantity and quality of water to residents of the District at an economical price.
- Monitoring effort to ensure other objectives are being met, not just operation - deterioration of environment, economic impacts, etc.

Red C

- Coordinating water supply with regards to. environment and conservation
- Don't like the word - too bureaucratic
- Efficiency and cost/economy
- Keeping things going
- Engineering, Mechanics
- How you do it - water supply - flood control - maybe more mandates
- How 'operations' are handled

Blue A

- Facilities
- Efficiency in operation
- Multi-purpose use - flood control vs. water supply/quality vs. ecosystem
- Balance
- Cost control
- Demand
- Land use - impacts

Blue B

- Management and movement of water to meet supply and demand consistent with financial constraints, conservation and reuse and environmental protection and enhancements.

The following definitions were provided for the planning objective category:
ECONOMIC

Green A

- Cost efficiency
- Maximize service and quality
- Forecasting trends and technology
- Quality/quantity ... reliable

Green B

- Cost and benefits of decisions or actions or factors.
- Supply and demand
- Allocation of resources.

Green C

- Using less water and thus saving resources
- Process of quantifying and making choices
- Cost of something (not just dollars)
- Aesthetic values versus cost-benefit analysis

Red A

- Long-term benefits are justified by the rate-paying community.

Red B

- Two prongs - first manage the project to maximize value of economic resources expended and second, provide a value-added service to the users. Users = customers, recreational users, all beneficiaries.
- Cost effectiveness - cost/benefit analyses. Trade offs between commodity and impact on other systems.
- If you need water, cost may not be as important - depends on degree of water needs.

Red C

-
- Allocating resources fairly and without waste
- Cost of water (NC vs. SC).
- Agriculture should be subsidized (this county) -- (including conservation measures).
- Sustainability of the community and its resources
- Cost to consumer, families
- Should have a baseline (allotment)
- Previous false expectations
- Money = power
- Concerned about build out.
- "In-filling"/reconstructing neighborhoods.

Blue A

- Ability to pay
- Water conservation
- Cost control - how?
- Cost breakdowns
- Benefit to community
- Return on investment
- Lower cost sources - water recycling

Blue B

- Ensuring that water is supplied through sources that make economic sense, with costs distributed equitably.
- Water is the fundamental building block for the economy.

The following definitions were provided for the planning objective category:
RISK

Green A

- Availability (lack of supply)
- Quality of supply
- Contamination - pesticides, industrial chemicals
- Reservoir - risk to environment
- Over supply - demands not as high

Green B

- Potential for undesirable consequences as a result of actions, decision, or factors.

Green C

- Level of hazard related to a particular action.
- "Risk" of opening up to new ideas

- What we have done - not making it worse
- Benefit of correcting vs. leaving alone.

Red A

- Measure of uncertainty (re water supply)

Red B

- Ground water subsidence -loss of capacity in aquifers
- Responsible management and minimization of adverse effects.
- Drought - want water all the time
- Quality of water supply
- Cost of eliminating risk
- Balance between Risk and Economics.

Red C

- Risk of running out of water
- Over consuming and droughts - *Cadillac Desert*
- Too much indebtedness.
- Declining quality of life.
- Harming the Delta
- Risk of earthquakes and inundation
- Contaminated water

Blue A

- Pollution
- Spills - industrial; treatment plant, manage NPS
- Water supply - adequacy
- Drought
- Facility failure
- Competing demands
- Imperfect information, e.g., accurate forecasting
- Environmental impacts on community sustainability
- Water treatment.

Blue B

- Possibility of contaminated water from industries and the general public getting into the water supplies, water table, creeks.
- Possibility of the loss of supply or failure of quality.
- Balance of risks you're going to take between 1 and 2.

The following definitions were provided for the planning objective category:
COMMUNITY

Green A

- Fairly distributed
- Equitably supply/quality and $ cost
- Widespread education
- Cost efficiency
- Maximum service and quality
- Forecasting trends and technology
- Quality/Quantity - Reliable

Green B

- A group of people of common interest whose actions affect others (internal and external)

Green C

- People served:
    - individual
    - family
    - business
    - government
    - industry
- Gathering of people for common goal, support, betterment
- Cohesiveness
- Environment - where we live

- End users of water
- Community responsibility - stewardship

Red A

- Groups of organizations, organized or not, whose needs put requirements on water supply and distribution systems, and who are, in turn, affected by the systems.

Red B

- Broad base including users/customers receiving direct benefit of water supply plus larger fringe of broad-base communities.
- Representation by all impacted by this decision-making process
- Not just customers, supply areas and their environment
- Homeowners, farmers - agricultural needs
- Recreational value

Red C

- Baseline when looking at water supply - community should be given viable alternatives.
- Community has got to relate to environment
- Don't import water (this is a variable system)
- Need to accept where we live
- Unawareness of the value of water (by the community)
- Economic viability of the community - water is key

Blue A

- Quality of life
- Community involved in process - participation and support
- Competing interests between users
- Quality environment, e.g., beneficial uses, recreation, birding, fishing

Blue B

- All water users (stakeholders): business, industry, households, government, agriculture, pets and livestock working to equitably utilize resources.

The following definitions were provided for the planning objective category:
ENVIRONMENT

Green A

- Community + natural resource
- Balance is important
- Maintain open space
- Corresponding events to air quality

Green B

- The world around us, natural habitats
- Pollution problems, protection responsibility.

Green C

- Natural environment - pre-human impact
- That which surrounds us - in which we live
- Public's conception of environmental consequences - lacking in education!
- Saving what we have and restoring damaged resources
- Non-human element

Red A

- The natural template (geography, climate, wind, watershed, habitats) on which is imposed the constructed environment (includes patterns of use)
- The interface of water supply and use in order to maintain sustainability.

Red B

- Production of water product without overt impact on sources or other requirements (not creating environmental disaster, balance of nature).
- Decisions should be based on scientific and technically balanced solutions.
- Destruction of Delta, salinity increases
- How water conservation and recycling fit into the environmental component of the process

Red C

- Maintenance of pleasant surroundings
- Long-term preservation of needed resources
- Natural settings preserved for school studies/enjoyment
- Environment is substructure of our life - we depend on it
- If we don't preserve environment we are at great risk.
- Preserve environment to pre-development conditions. Control less and let environment do the work
  - riparian setbacks. (1986 setbacks were good - not after that. Especially flood control).

Blue A

- Human-centric - how man uses water resources
- Impacts to ecosystem
- Goal - long-term environment + community sustainability
- We have limited resources.
- Balance environmental issues.

Blue B

- How will the environment affect water storage, water transportation and water conservation, and vice versa?

EXERCISE 3
PAIR-WISE COMPARISONS

The breakout groups were then asked to rank the objectives in order of importance and to explain the reasons for the rank order. The exercise was conducted by discussing each category of objective against each of the other categories. **The matrices used for this exercise by each breakout group are attached.**

Green A

The group felt that many of the objectives were difficult to separate and that feeling was represented in the resulting scores. Some of the comparisons such as Operations and Community and Community and the Environment were especially difficult for the group to discern and, therefore, were given a split ranking.

The most important objective chosen by the group was a tie between Operations and Community. Public involvement, education, and public acceptance were viewed by the group as having primary importance. However, because Reliability is closely tied to the economic well being of the County, Operations was viewed as equally important. The group continually emphasized the Community, in terms of public education and awareness of choices, as being a very important consideration.

Economics ranked a close second, because it was understood that economics were a primary driver in any District decisions. The group felt it was important for the District to strive to obtain those supplies which would give them the biggest bang for the dollar. The group commented that both Operations and Economics are interrelated, and go hand in hand. The critical decision is defining the level of service the customers is willing to pay for, and understanding the circular relationship between reliability and cost. Other thought touched on was that the District's cost structure is important to the retailer. In general the group emphasized that the District should deal honestly with the public on what can be delivered ... don't make promises.

Environment ranked a close third, with the thought that Operations should look to the Environment in decision-making. One person in the group felt the term "avoid impacts" should not be used, and suggested the term "minimize impacts" was better. Most members of the group recommended the Environment must be considered with costs in mind, and suggested the Community must be educated on the Economic relationship to the environment. Many felt the Environment was more important than economics.

Risk was ranked last. Risk was perceived by the group as an objective which was inherent within each of the other categories. The group did not care for the objectives under the Risk Category and felt their definitions for Risk from the morning were more appropriate (see definitions). The key for this group was education of choices and education of risks and education of operations as it relates to cost.

Green B

The group defined the objective category words fairly consistently with the District Board objectives, with the exception of Community and Environment. These two categories were defined in a more generic sense. This difference in definitions seemed to carry through the prioritization exercise, even after they were informed of the District Board objectives within the Community and Environment category. The group prioritized the categories in the following order: 1) Environment, 2) Community, 3) Operations, 4) Risk, and 5) Economic. During the exercise, there was much discussion regarding the risk, economics and environment categories and how the objectives should be applied to planning. Their recommendation was that the Risk category be considered a part of all the other objectives. Likewise, their observation is that the District should already be minimizing district costs and rate impacts in all District activities and planning activities. And, the District is already required by law to avoid or minimize adverse impacts to the environment as an initial goal. So, having a separate set of planning objectives would be redundant to how the District already operates. Initially, they did not want to consider ranking the Risk category, but went ahead anyway. Their key interest in the operations category was in meeting the community's needs for reliability and flexibility. Their rationale for ranking the Environment and Community so highly was that they assumed, based on their definition, that the community is part of the environment, so by rating the environment highest that would automatically include community in the highest rating also. They believe that the Community category should be highly prioritized, because the community is the District's customer.

Green C

While this group proceeded quite well through the introductory portions of the morning session, several members of the group voiced considerable resistance to participating in the pair-wise comparison. Their primary concerns about the exercise included:

- Apprehension that the exercise was designed in some fashion to lead the group toward "buying in" to decision-making priorities already held by the District. The fear was that the District already knew what it wanted to do; this exercise was intended to obtain validation from the public.
- The categories, and constituent objectives, are very complex and inter-related. Simple either/or priorities cannot meaningfully be expressed.
- In some cases, objective categories may be of equal importance; or, priorities between two categories may vary dependent upon the situation.

After considerable discussion and exploration of specific situations, the group did complete the exercise. Willingness to proceed was based on: 1) eventual acceptance of the assertion that the District was truly interested in hearing the public's opinions on these priorities, and 2) realistic approaches to a final water supply master plan must respond reasonably well to all the objective categories; the choices will likely not be "for" one category at the extreme expense of another -- instead, the choices will be more focused on degree of success in one category over another.

Major conclusions or directions expressed in the pairing priorities included:

- Environmental concerns should receive the highest priority. Too much environmental damage has already occurred as a result of human development in general and water supply development in particular. Emphasis should be placed on public education regarding the past and potential environmental consequences of development. An educated public will be willing to pay a higher price and endure some risk or inconvenience to avoid further environmental damage. Sentiment was also expressed that the water supply master plan should also include some degree of environmental restoration.

- The Community category is also very important, and should be considered a higher priority than Operations, Risk, or Cost. Within the Community category, objectives which centered on water quality, efficiency/conservation, and public involvement (including public education) were those which most influenced the high rating of the category in general.

- Regarding the above two points, group members stated: "People will accept some risk for quality of life", "Environmental and Community values outweigh some risk", "People will pay for 'clean and safe'", and "The public does not expect a risk-free system."

- Cost received the lowest priority in general from this group. Overall, the assertion was that an educated public will pay for environmental protection, water quality, quality of life, resource conservation, and even increased reliability.

Red A

The group consisted mainly of environmental people (League of Women Voters, Open Space, Greenbelt Alliance, Public Health grad student), so there was an overwhelming concern for the ENVIRONMENT. Although the group had trouble understanding the roll-up objectives, they nevertheless followed the definitions outlined by the District and the Board, modifying two areas: 1) under the definition of "Community," there was mention of maximizing opportunities for recreation and environmental use, but no examples sited for the environmental component. The group also modified the Environmental objective so that the District would go beyond "avoid or minimize adverse impacts" to actually working to RESTORE the environment.

The group's general feeling was that we had already done enough damage to the environment, it was time that we started trying to make the environment the priority. Comments included:

- We need to learn from the past: look at the COSTS associated with not acknowledging long-term environmental impacts (e.g., superfund site cleanup, waste disposal sites)
- Natural side is pretty much gone
- There are more environmentally friendly ways of living
- Are we leaving anything in place for the long-term ecosystem?

The group did want to see the District take a more proactive role in helping control growth in the county.

Red B

This group overwhelmingly selected the Community category as the most important. They had previously defined this category in very broad terms to include District customers, other County users (for example, recreational users), and communities located adjacent to source waters. The group believed that needs and demands of the community would drive the economic, environmental, and operational decision making. This feeling was most apparent in the discussion of economic verses community where group members commented that people "need water so the cost is irrelevant." The Risk and Operation categories were considered the next most important by the group. The reliability and availability of water was more important to group members than Economic and Environmental considerations. The group indicated, however, that a balanced solution was preferable to one dominated by only one category.

Red C

There was some initial reluctance by the group to perform this exercise because they had defined different meanings to the words "operation", "risk", and "community", as discussed in the earlier exercise. After I asked them to evaluate these pairs based on both their definitions taken down on the flipchart AND in conjunction with the objectives stated on the printed chart, the group agreed to perform the exercise. The clear-cut favorite category that garnered the greatest support was "Environment". The biggest obstacle in this exercise was in the comparison of "operations" with any other category. In the pairwise comparison exercise, Environment came out tops, followed by Community, followed by Risk, then Economic, and trailed by Operations.

Blue A

The group's definitions of the objective categories reasonably paralleled the Board's definitions, except they felt the Environment Category could not be distinguished from the Community Category. Several members of the group felt the Environment Category should include ecosystem enhancement and restoration as an objective. The group had a tendency to be inconsistent in how they applied the definitions throughout the exercise.

The group was uncomfortable rating the objective categories in the pair-wise comparison exercise. They believed the objectives were all dependent upon one another (e.g., "community should incorporate economic"; "risk includes consideration of environmental impacts"...). They were, however, able to select one category over the other in all cases, except for the Environment and Operations comparison. While the group did not do an overall comparison at the end, the pair-wise exercise resulted in the following ranking: 1) Community and Risk; 2) Environment and Operations; and 3) Economic. The Community category ranked among the highest because the group felt that if the community objectives are met, that all other objectives would be addressed. They also ranked Risk high because they believed that "people won't stop using water, no matter what", so risk must be minimized. Environment received a mid-ranking because it was subsumed into the Community Category. Operations Category is an example where the group lost sight of the definition (e.g., "If you endanger your water supply, it doesn't matter how good the operations are"). The group did not select Economic in any of the pair-wise comparisons.

Blue B

The community category clearly embraced the most important objectives to this group. All other categories were thought of as elements in, or services to, community values. The sub-objective of protecting the economic well being of the County came up several times. The sub-objective of maximizing opportunities for environmental uses was strongly endorsed by one advocate before she had to leave early in the exercise. Both the economics and environmental categories ranked lowest overall in part because the community category reflected some balance of these objectives. The group's discussion of environment/economics concluded in a tie and there was much sentiment that these two need to be integrated. Second and third ranked objectives were risk and operations, respectively. These two categories were also seen as highly interrelated, a chicken and egg question. The exercise began and ended with this comparison, finally concluding that risk should be minimized as possible and then operate accordingly. The group was predominantly professionals in water/wastewater and highly water dependent industries with a couple of neighborhood citizens.

EXERCISE 5
COMPONENT EVALUATIONS

After a brief presentation on each of the components, the facilitated groups were asked to discuss how the components respond to the values/issues/viewpoints identified by the groups during the morning session (exercises 2 and 3). The following summaries, provided by the group facilitators, are followed by the notes from each group.

Green A

This group felt that Conservation was important to include in a solution for future supplies. However, they felt it would be unsuccessful without more meaningful enforcement mechanisms. Suggestions from the group included tax incentives for residential and commercial customers in terms of implementing new products and programs. Recycling was viewed by the group unanimously as a component which could assist the District, especially during a drought and had high drought reliability. A particular distinction was not made between non-potable recycling and indirect potable reuse other than a large degree of education would need to accompany the implementation of any indirect potable reuse project. Long-term transfers were viewed by the group as more appealing than short-term due to their increased reliability especially in the long-term, the perception was that short-term transfers may not be available farther in the future. In addition, the water not used through long-term transfers in wet and normal years could be resold, used for environmental mitigation or combined with a long-term banking program. The group agreed that a new reservoir would be too great an environmental and economical cost.

The group thought it would be useful to combine a mix of components for any future supply. They attempted to create that mix including recycled water long-term transfers combined with banking and some increased level of conservation.

Green B

The group members wanted detailed technical information prior to beginning to evaluate the 8 components. They specifically wanted to know what additional amounts of water could potentially be generated in terms of a range of acre feet. Some group members needed to know the meaning of technical terms used, such as acre feet, shortfall, and rate payer. Even after the technical experts provided information in order to start the evaluation, the group still felt that they would have been better able to evaluate the components, if they had received technical information prior to the meeting. The focus of the group was on developing components that had the most local control. They thought that more reliability would be the result. They realized though that more than local control based components would be necessary in order to meet the shortfall. They then thought that long term transfers would help meet their issues. They thought that water banking and relying on short term transfers was extremely risky. In their viewpoint, they were concerned that future adjudication of the non-local groundwater basins would affect the District from being able to retrieve the water we stored. They added that if the District relies on short term transfers, that would be a sign of poor planning. They expressed great concern about the potential environmental impacts which could result both in the county and outside of the county in relation to the reservoir and transfer components. They all agreed that the recycling and demand management components should be part of the planning process. Some individuals in the group raised the question of why doesn't the District help reduce demand by reducing development in the County. They evaluated all 8 components. Their conclusion was that no one or two components should be relied upon. They recommend that a "menu" of components be used in order to provide "back up", if one or two components do not perform as expected.

Green C

Consistent with the attitudes expressed in the morning exercise, this group felt that Demand Management/Conservation and Recycling were very important components of any sound supply plan. Beyond this, however, the group felt they were not sufficiently educated regarding the specifics of how the various components worked. For this reason, favorable responses to various components emerged more from a view that components which were local (i.e. those which would provide maximum local control) would be preferable. Illustrative observations made by group members included:

- The Maximize Local Storage component should be emphasized, including additional small reservoirs and ensuring that local groundwater aquifers are kept at high levels (and that further subsidence be strictly avoided).

- Ground water banking should be viewed with suspicion. There may be high risk that the District would not get back the same amount or quality of water it "banks".

- Long-Term Transfers may be part of the solution, but must be coupled with increased storage capacity -- particularly local storage. However, the District should not participate in any program which continues or benefits from the current situation in which water in the Central Valley is essentially subsidized by the government. Artificially low prices cause lack of efficiency and higher environmental impact.

- Long-Term Transfers are preferable to Short-Term Transfers; the latter could be very unreliable and the District could find itself in "bidding wars" during drought periods.

A major new reservoir would involve a very long lead time and could cause significant environmental impact.

DANA WRIGHT - Red Table A

My group consisted mainly of environmental people (League of Women Voters, Open Space, Greenbelt Alliance, Public Health grad student), so there was an overwhelming concern for the ENVIRONMENT. Although the group had trouble understanding the roll-up objectives, they nevertheless followed the definitions outlined by the District and the Board, modifying two areas:

1) Under the definition of "Community," there was mention of maximizing opportunities for recreation and environmental use, but no examples sited for the environmental component. The group also modified the Environmental objective so that the District would go beyond "avoid or minimize adverse impacts" actually working to RESTORE the environment. The group's general feeling was that we had already done enough damage to the environment, it was time that we started trying to make the environment the priority. Comments included:

- We need to learn from the past: look at the COSTS associated with not acknowledging long-term environmental impacts (e.g., superfund site cleanup, waste disposal sites).
- Natural side is pretty much gone.
- There are more environmentally friendly ways of living.
- Are we leaving anything in place for the long-term ecosystem?

The group did want to see the District take a more proactive role in helping control growth in the county.

This group was very interested in water recycling and devoted the most discussion time to this component. The group felt the water source was dependable and made efficient use of District resources. Some members believed pilot studies were needed to assess impacts on landscape and industrial operations and maintenance. Others countered that water recycling is a tested and proven technology. There were no concerns expressed about indirect potable reuse. However, the cost of the indirect potable and non-potable water recycling programs was a concern. Everyone agreed that Demand Management should be pursued, however, they questioned how much more could realistically be achieved and how far that would go to solving the water supply problem. The group was interested in the Maximize Local Storage component and strongly believed the District should increase the efficiency of its existing system. There were strong reservations expressed about the risk associated with Water Banking. The group believed the District would be relinquishing too much control to others and the water would not be available when it was needed.

Red C

The new reservoir option received a resounding thumbs-down except from the Parks representative who indicated that if recreation is allowed at a new reservoir, it would benefit Parks and Recreation. The group did not like the word "Baseline" or the way the word was used. Both short and long-term transfers were supported only as an "as needed" option. There was strong support for recycling, water conservation (demand management) and maximizing local storage. Water banking was a "yeah, its okay", with a couple people expressing skepticism for this option.

Blue A

The group spent most of the time during this exercise asking questions of the technical experts. Very little time was spent focusing on discussing the merits of each of the components and comparing them. In general, the group agreed that the IWRP should include Demand Management, Transfers (they did not distinguish long- from short-term transfers), Recycling, focusing on non-potable because it seemed more feasible to them, and Maximize Local Storage. They opposed a New Reservoir, because of the environmental impacts, and were suspicious of Banking, due to concerns over the management of the bank (loss of control). During the discussion of Demand Management, the group expressed strong opinion that the District should be involved in growth policy decisions to manage demand. The District was referred to as the "silent partner" in growth policy.

Blue B

This group generally wanted more information about the District's water situation, including clear numbers, before offering judgments on the components. What about desalination? What are the details of the recent Semitropic deal? This group never did determine the order of their discussion by components, rather beginning with general questions about the present water situation and planning assumptions, covering many "components" at the same time. There were many questions about the details of demand forecasts and projected shortfalls in supply. The one component the group was clearly interested in was water recycling. Both good and bad examples came up. Technical operations and water quality must be successfully worked out, but it seemed to several to be the way things are going. The group also simply dismissed a new reservoir. There was confusion with the current imported contracts and shortfalls and banking, long term transfers, and short term transfers components. Maximizing local storage sounded simply good. That discussion expanded to fair charges for clear benefits and new development paying for improvements to accommodate itself.

Notes from the groups' discussions on each component (strategy) follows. However, all facilitated groups did not discuss all components.

BASELINE

Green B

- Could have an environmental effect so may not meet the groups concerns
- Would have to do more, need more components

Red C

- Should include dry year demand
- What people need is less than what they want to use
- Tiered cost - base cost and cost over
- Rename Baseline to "No Action" or "Status Quo" Alternative.

Blue A

- Uncomfortable/not satisfied with District's hands-off role in growth policy.

Blue B

- Don't need to talk about new reservoir - little chance - not going to happen
    - look at local storage
- What is assumption for growth?

DEMAND MANAGEMENT

Green A

- Some agencies have additional programs
- Industrial incentives
- Mandatory measures must be coupled with enforcement
- Conservation-based rates (inclining block)
- Tax incentives -- point-of-use heaters
- Do not penalize savings

Green B

- It may benefit the environment
- It is a basis for other components
- Need a lot of community involvement and outreach effort - especially re: risks of gray water
- Keeps rates lower due to less investment in infrastructure
- If done this has reliability and flexibility built in.

Green C

- Improve domestic practices to reduce consumption
- Investigate scientific solutions to conservation
- Conservation = a major part of the solution (along with growth management)

Red A

- Continued emphasis has to be a part of anything done
- People using less water - "permanent conservation" efforts integrated into peoples' lives
- One-time gain: once you've done things, you're done (don't do them, you lose)
- OK to use in "wet years" ... efficiently
- People can participate in it (like "policy")
- Difference in water use - residential and agricultural land? - It's a wash

Red B

- Continuous message
- How much more can we do than we've done
- What is baseline conversation level that all customers should do? How much more beyond that?
- Demand management is good but if we're only talking 10-15% maximum, it is quickly offset by growth
- Short-term solution
- Price is probably the most effective way to control demand
- More efficient use of a commodity.
- There is a long-term return to demand management
- Conservation is easier when it's not raining
- Tremendous amount can be conserved through use of effective technology
  - irrigation equipment
- Education is important - room for improvement - there is always need for efficient water use
- Radio/TV have role to play in conservation education

Red C

- Inverted rates
- With good education, public acceptance is fine
- If you're selling less water, lay off some people at the District
- Why "reduced stream flow"?
- Ask for a base flow guarantee based on a conservation program
- Limits to all landscaping
  - drought-resistant plants, or using on-site reclaimed water

Blue A

- Long-term conservation = hardware changes
- How would mandatory conservation be low cost?
- Recollection that we far exceeded conservation during last drought "rose to occasion", therefore, question that "public acceptance uncertain"
  - risk of unacceptance - is there data from surveys to support this assumption?
- Need more information on gray water
- Concerned about less water for environment

WATER RECYCLING

Green A

- Focus on industry/agencies
- Tax credit to alleviate consumer cost - dual piping
- Future reliable source
- Requires increased education
- Benefits in reducing recharge
- Brine concerns
- Cost sharing would benefit
- Could benefit those with high discharge
- Removal of metals

Green B

- Water Recycling - not gray water
- Deals with issue of sustainability
- Pulls less water in from outside of County, so more water for streams
- Use for ground water recharge so that continuous flow regime occurs from reservoirs
- Community happier because more water in streams
- More reliable
- Must be aware of treatment needs

Green C

- Reuse of water also helps manage water quality impacts (disposal) ... (interception and treatment of waste water)
- Improve domestic practices to reduce pollutant loads
  Technical/scientific advancements important to feasibility of reuse (i.e. cost, level of quality)
- Goal is potable recycling
- Research/embrace most advanced techniques

Red A

- Advanced treatment expensive!
- Location of treatment plant to need piping
- Implemented to some extent
- Applications are there ... golf courses, freeway watering
- Rechargeable or treatable
- Public acceptance? - education key
- Can move it to multiple communities (indirect potable)
- Technology may improve
- Brine disposal ups the cost a little (built into cost)
- Cost-sharing potential
- Committed (to date) 14 Kaf
- Cost increases split with discharger
- Appeals to groups looking for more “hook-ups” (growth inducing)

Red B

- It's always available, dependable source of water
- Cost and quality are a concern
- Quality impacts on customers' irrigation systems and O&M
- Can reduce fertilizer costs
- Mitigates some of the problems associated with wastewater disposal
- Suggest pilot studies
- Economics are important consideration
- Idea ecologically sound
- Landscape ± industrial uses
- Define costs associated with customer switching from potable to non-potable
- How much soil augmentation would necessary; changing plants
- Could price recycled water below potable costs?
- Quality of recycled water is better than some drinking water

Red C

- Price of recycled water - potable - non-potable
- When will the 100,000 ac-ft. be realized (2020)
- For plant use - salt accumulation
- Possible use of wetlands
- Disposal of heavy metals
- Planning of new development should incorporate non-potable water uses.

Blue A

- Why not put non-potable in Lexington for recharge
- Develop new uses for non-potable Industrial?
- Emphasize non-potable because more feasible (it seems)
    - can it be marketed elsewhere?

Blue B

- Bonfonte difficulties, technically solvable, City of Santa Clara experiences
- Tends to be where we're headed
- Almost drought proof
- Like to see more recharge from groundwater clean-up activities
- There is a lot of re-use of industry process water - Hetch Hetchy good
- Not a lot of low lying fruit for industry
- The easy and moderately difficult stuff is done
- Capital outlay, low playback
- Worried about water quality. Can there be different higher standards?

MAXIMIZE LOCAL STORAGE

Green A

- Requires cyclical flexibility
- Cost in maintaining facilities
- Taking advantage of water in high flow periods
- Could increase streamflow augmentation

Green B

- Sustainable source of water
- May be an operational benefit, especially re: NO_3 in South County
- Addresses the public health issues relative to NO_3
- Relatively moderate costs
- Improves flexibility of District operations

Green C

- Optimize this - prevent further subsidence
- Maintain local aquifers as full as possible
  - most economical
  - do not lose capacity
- Use imported water first
- Small reservoirs in District.

Red A

- Good concept; gains nothing and costs (doesn't amount to much)
- Not all systems can take treated water
- Counting on local rainfall to recharge
- Could deplete local reservoir storage (drawdown rate)
- Doesn't expand water supply
- Treatment plants are EXPENSIVE
- State or Federal Government can still withhold and you pay the same
- Can take water that you're paying for and put it in aquifer

Red B

- 10-15,000 AF of water
- Increasing efficiency of existing systems
- Build more dams

Red C

- No way able to keep reservoirs full when using reservoirs for incidental flood control
- District should consider use of underground tanks as an intermediate storage (use of quarries, etc.)
- If reservoirs are full, recreation benefits

Blue B

- Is there a downside to this? ($, not a lot of water)
- Disparity in costs - how is it going to be distributed?
- South County see no return for added costs
- Pay proportional to what is received
- Control growth or new users pay new costs
- Benefit assessments
- Should existing users have to pay costs?

NEW RESERVOIR

Green A

- Recreation can damage water quality
- Environmental problems
- Cost and number of years to build
- No flexibility for changing conditions
- Drought sensitive

Green B

- Does not help in a long-term drought
- Likely public would not accept due to environment impacts and costs
- Storage facilities

Green C

- Natural flushing of system (e.g. salinity ...) reduced/eliminated by too much storage... (also any major storage option) -- Need to retain/restore
- Long lead time; only part of solution
- High environmental cost/impact
- Small reservoirs at head waters preferable to large reservoirs
  - allow instream flow management
  - allow groundwater recharge management
  - permitting = easier
- If new reservoir - should be in County - otherwise go with water banking to include storage for dry years

Red A

- Place to put water we've paid for in wetter years
- More economical than banking?
- What is cost to build? (350 Kaf) $300 mil.
- Doubles surface storage
- Dams: Staying away from earthquake faults
- Fills in during dry times
- Can be run through existing systems

- Banking: more "pay-as-you-go" versus "pay-up-front".
- Have water, especially when you need it.
- Environmental impacts? Problematic
- Compare in cost to recycling
- Best reliability for short-term

Red B

- New Reservoir very costly
- Politically difficult
- Environmental concerns
- More water
- More recreation opportunities

Red C

- Too much environmental impact
- If recreation allowed, possible benefit

Blue A

- Would be better to rely more on banking then new reservoir
- Recycling is continuous supply and is going to Bay - focus on recycling over new reservoir.
- Concern that growth inducing
- See other options implemented before this = demand management
- What's cost comparison? More $ than Semitropic
- Impacts to environment not known

WATER BANK

Green A

- Could be risky
    - may not get same amount
- Prolonged drought could increase risk

Green B

- Caution: High risk not local control
- If it works, then this helps reliability
- If it works, then could maximize flexibility.

Green C

- Maximize local storage first
- Use surface water first, save groundwater

- Banking in Central Valley is "Risky". Can we guarantee we can get it back when we need it?
  - Answer = contracts
  - trading allocations
- Risk of basin adjudication?
  - would take years (time enough to resolve contracts)
- Alternative to banking = reservoir (for maximum storage of existing allocations/contract water). We should maximize storage

Red A

- What's the guarantee? - (droughts don't happen in isolation)
- Only work state-wide - helps balance out system
- Encouraged by current administration - no other storage method
- Improves efficient use
- Not a panacea
- Meters in the valley! (not Santa Clara)
- Conservative measures imposed on farmers

Red B

- Assured availability of water
- Efficient way of using excess water, restores aquifers
- Maximum risk factor
- Are there conveyance problems associated with this option?

Red C

- Likes concept - spreads out impact of drought
- Flexibility in CDP

Blue A

- Concerned about management of program and pumping by overland users
- Facilitates regional cooperation and policy planning.

TRANSFERS (general)

Green C

- Not right to benefit from purchase of subsidized water - I.E. USBR contracts. Cost is artificially low
- Conservation is much preferable

Blue A

- If new storage needed for transfers (new reservoir) - then do not like this plan

Green C

- Start with short term; if beneficial, go long term?
- But - very risky - available when needed?
- Very costly
- Bidding wars in times of need
- Less desirable than long term

Red C

- Third party impacts could exist
- Quick fix
- Extreme condition, could be an alternative
- Should not be counted on
- Should definitely include rationing and conservation. Should come/occur after rationing and conservation

Blue B

- Reliability? Wait until there is a problem and then fix it.

LONG TERM TRANSFERS

Green A

- Paying for years you may not use
- Less risk/more reliable than short term
- Coordination with banking necessary
- Recognize renewal
- Can be used to facilitate staging/phasing

Green B

- Environmental burden on someone else. Another outside county has the watershed impacts
- Good reliability and flexibility
- Good financial in the distant future

Green C

- Could we store unused entitlements in wet years (versus selling them)?
- Answer: Only to some extent; District doesn't have enough storage to completely do this. Would need banking or new reservoir.
- Much safer/more secure than short term

Red C

- Should not be dependent on outside supplies (exporting Environmental problems)
- Depends where you draw the baseline

SHORT-TERM TRANSFERS

Green A

- More risky than long-term.
- More risky for prolonged drought

Green B

- Potential for high cost and risky availability
- Flexible - meets a need
- Symptomatic of poor planning to have to use it

INTEGRATED WATER RESOURCE PLANNING PROJECT
EXTERNAL STAKEHOLDER PUBLIC FORUM
EXECUTIVE SUMMARY

Purpose

The Level 2 Public Forum held on August 5, 1995 at the Santa Clara Convention Center was a single element in the overall Integrated Water Resource Planning (IWRP) Project stakeholder involvement program. The Level 2 Public Forum was intended to expose a larger audience of special interest groups and agencies to the IWRP process. Level 1 stakeholders were invited as observers to hear from others outside of the core team.

The project team used the Level 2 event to verify basic priorities and values which had been introduced by the Level 1 core team, and to educate interesteed groups about the IWRP process.

General Observations

The event was not as heavily attended as staff might have anticipated. This continues the pattern seen throughout the public involvement process. The invitation list for the Level 2 event exceeded 1,200 individuals and organizations. Attendance at the event consisted of 62 individuals. Groups represented included business, environment, recreation, public health, water retailers, local law enforcement, academia, county and city planning, agriculture, and green industry.

The general reaction of attendees was good. Staff received numerous comments indicating that stakeholders were pleased to be part of the process. When asked to rate how worthwhile the day had been, stakeholders assigned an average score of 8 (out of a possible 10)

Key Outcomes

Two central themes appeared throughout the day's discussions:

1) Stakeholders felt that the District should go beyond mitigating environmental impacts. Stakeholders consistently supported enhancement of the local environment. Stakeholders expressed a strong connection between the human environment (community) and the biological environment. Comments seemed to indicate that enhancements to the environment added value to the adjacent communities.

2) Stakeholders felt that the District needed to take a stronger role in land use planning. Most stakeholders felt that the District's current approach of meeting the need as defined by local land use planners was inadequate. The stakeholders felt that by taking no position on the rate of growth which could be sustained in the county, the District was encouraging growth.

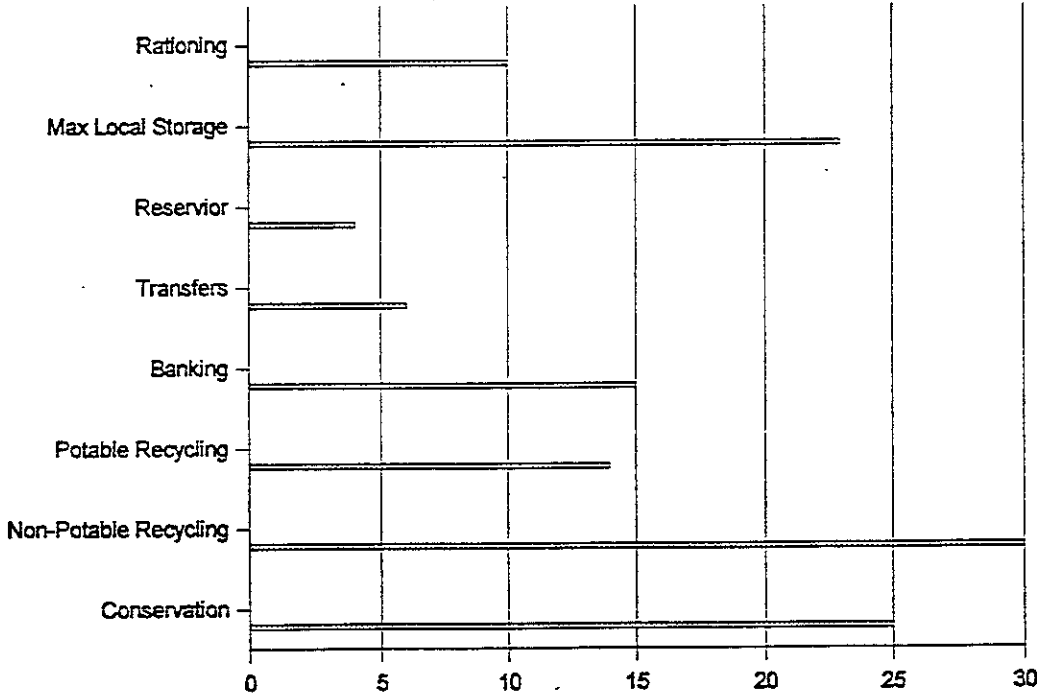
Exercise Results

Echoing sentiments heard in the Level 1 process, the Level 2 stakeholders expressed a strong preference for recycling and water conservation as preferred components in a strategy for meeting future water demands. In the afternoon session, most small groups identified recycling and demand management as the preferred components, followed closely by increased efficiency of local supplies.

Water banking and transfers received less support, amid comments questioning the reliability of these options. The lack of local control also influenced perceptions regarding the risk associated with these components. Construction of a new reservoir received the least support, as a result of environmental, cost and implementablity concerns. These results were duplicated in the participant survey given in the morning. Figure 1 displays the number of votes received for various components.

Figure 1.

Water Supply Component Preferences

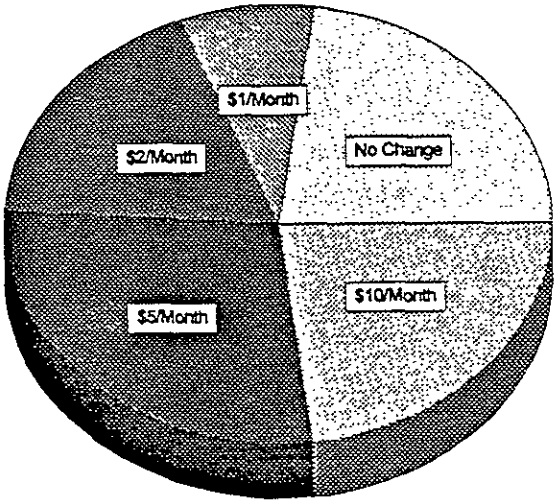


Other Observations

Both in the participant survey, and in the morning sessions, stakeholders ranked reliability and environmental impacts as the key factors to a successful water supply strategy. Water quality ranked third followed to a much smaller degree by cost and recreational considerations. A little over one half of the participants were willing to experience a $5/month ($120/af) or greater increase in their water bill to achieve a reliable water supply (Figure 2.).

Figure 2.

Willing To Pay For Reliability



A number of stakeholders expressed the belief that new development should pay the full cost of service. The belief seemed to be that this would provide equity and limit the rate of new development.

Almost every group identified increased education efforts as being an essential component to any future strategy. Education in the source and reliability of supplys, the need for efficiency, and the use of certain sources (potable recycling) were suggested.

APPENDIX D
LEVEL 3 PUBLIC OUTREACH

LEVEL 3 STAKEHOLDER QUESTIONS AND RESPONSES FROM DISTRICT STAFF

The following questions were raised during IWRP public meetings in June and November 1996. Brief responses from the District have been included, where applicable, as well as references to appropriate sections of the final report for more detailed explanations.

What are all sources of water for the District?

> The District's water supply comes from a variety of sources: local, including rainfall and subsequent runoff; recycled; and imported. For a complete discussion of current and future supply strategies, see the Executive Summary and Chapter 6.

Have the underground aquifers ever been completely filled? What is their current status?

> See Chapter 5.

What percentage of recycled water is currently used for landscaping, as compared with potable water?

> See Chapter 6.

Does the district pump from the groundwater basin in dry years and recharge in wet years?

> Both activities are ongoing in wet and dry years; however amounts of water pumped or recharged depend on current hydrologic conditions. See Chapters 5 and 6.

Does the District anticipate that production of recycled water will grow in the future to meet more of the irrigation demand?

> Yes; see Chapters 6, 10, and 11.

What are the cost implications of increased water recycling?

> See Chapters 6, 9, and Appendix H.

The District has invested a lot of money in infrastructure for imported water supplies. Why has it invested so little in water recycling to date?

> Recycled water is a relatively recent element in large-scale water supply planning, and one that the District plans to devote more attention to. The IWRP preferred strategy calls for the District to increase its participation with local wastewater agencies in the development of recycled water; both non-potable and indirect potable recycling could be considered.
>
> The area of future water recycling was targeted as an issue for future Board policy discussion (see Chapter 11). Among other topics, the District's pricing policies and their impacts on water use and markets for non-potable recycling will be further investigated.

District flood control projects are often unattractive. Isn't it possible to create more natural-looking flood protection projects that are also cheaper?

> This question fell outside the scope of IWRP objectives, which dealt mainly with water supply issues, and was forwarded to the appropriate District flood protection expert for follow up. Flood protection issues are being explored in the District's Comprehensive Flood Management Program, now underway.

What is indirect potable recycled water? Are there potential health effects associated with it, such as viruses? What are the water quality issues associated with both non-potable and indirect potable recycled water?

> Non-potable recycled water is wastewater that has been treated for limited irrigation uses. As discussed in the IWRP, indirect potable recycled water is highly treated wastewater, which is then blended in a reservoir for groundwater recharge or delivery to a District treatment plant for further treatment and general use. See Chapter 6.
>
> Public health aspects of recycled water were outside the scope of the IWRP; this question was forwarded to the appropriate District water quality expert for follow up.

Has the District considered recharging underground aquifers with recycled water? If so, what are the potential environmental problems associated with such a practice?

> Groundwater recharge of recycled water was discussed in the IWRP process; however, participants preferred the concept of surface storage of recycled water. See Chapter 6.

Aren't there a lot of agricultural chemicals in the imported water that's delivered to the County? How does recycled water compare in chemical levels?

> Technical water quality discussions were not addressed directly as a part of the IWRP process. This question was referred to the appropriate District water quality expert for follow-up.

Is the District assisting the City of San Jose in its recycled water program, including the cost of dual plumbing?

> The IWRP preferred strategy calls for the District to increase its participation with local wastewater agencies in developing additional recycled water throughout the County. Types and level of participation will be subject to future negotiations, and both non-potable and indirect potable recycling could be considered. At this time, dual plumbing is not being considered. See Chapter 11.

Is the District assisting any local municipalities with water conservation programs?

> The District administers a countywide ultra-low-flush-toilet (ULFT) program that involves 13 local municipal and private water suppliers, and works cooperatively with them to implement additional water conservation programs. The District provides both financial and technical assistance to local retail water suppliers in these efforts. See Chapter 7.

For future water supply reliability, is the District considering reintroducing mandatory water rationing? If so, what magnitude of drought would cause this to happen?

The IWRP preferred strategy does not envision mandatory rationing in the future; however, the District always encourages responsible water use. Although mandatory rationing is not a part of the preferred strategy, ongoing demand management (conservation) programs are a core element. See Chapter 7; Chapter 11 for discussion of contingency actions outside the preferred strategy.

What is the optimum amount of conservation to help meet future demand?

See Chapters 7, 8, and 10.

If the County did experience a 100,000 acre-foot water supply shortage, what additional or new conservation programs would be considered to meet demand?

See Chapters 9 and 10.

What percentage of flows to streams and creeks are controlled by District reservoirs and other District water management operations?

See Chapters 5 and 6.

What will the IWRP project do with public feedback from these meetings?

See Chapters 2 and 11.

How much water does the District contribute to the environment for environmentally-beneficial uses?

IWRP stakeholders targeted environmental enhancement as a policy issue for future Board discussion, specifically, the District's role in enhancing the local environment through streamflow augmentation and other mechanisms. See Chapter 11.

Are the water needs of natural habitat figured into overall demand projections?

No; however, the District's role in enhancing the local environment through streamflow augmentation and other mechanisms is an important policy issue that has been raised by stakeholders and referred to the District's Board.

What are the future possibilities for water treatment by ozonation? What about other technologies, like ultraviolet radiation?

The IWRP used Objective 13—Maximize the Quality and Treatability of Source Water—as an essential element of its evaluation criteria (See Chapter 3), and high levels of water treatment were discussed for indirect potable recycling. However, ozonation and ultraviolet treatment methods were not discussed in depth as part of the IWRP process. The District has been performing pilot studies on ozonation, and this question was referred to the appropriate District water quality expert for follow-up.

Are political forces within the County considering limiting development to offset projected future water shortfalls?

The District is not a land-use agency. However, its role in the future growth of Santa Clara County is an important policy issue that was raised by stakeholders for future Board discussion. See Chapter 11.

If local citizens indicate that environmental enhancement is a community goal, will the District change its current environmental policy to reflect community priorities?

As stated above, environmental enhancement was targeted by stakeholders as a policy issue for future Board discussion. In addition, the IWRP planning process is designed to be ongoing, and will be revisited every 3 to 5 years. Public outreach and stakeholder involvement are viewed by the District as an integral part of that process. Community priorities will continue to be reflected and integrated into the process well into the future. See Chapter 11.

What unhealthful chemicals are found in District water? What are their side effects, and what is the District doing to counter them?

Technical water quality issues were not addressed directly as a part of the IWRP process; this question was referred to the appropriate District water quality expert for follow-up. It is a District goal to integrate IWRP objectives with other high-priority District work. In this case, water quality issues are covered in the Imported Water Project (which includes protection and enhancement of the reliability and quality of imported water supplies) and the Watershed Management Coordination Project (which includes improving water quality to protect source water and ecosystems in Santa Clara Valley watersheds and the South Bay).

Will fluoride be put into District water? Will the public have any opportunity to give input on fluoridated water?

Legislation requiring fluoridation of water is on hold pending identification of funding. This issue was not addressed directly as a part of the IWRP process; however, the question was referred to the appropriate District water quality expert for follow-up.

SANTA CLARA VALLEY WATER DISTRICT

News Release
Contact: Alison Russell
Public Information Representative
(408) 265-2607, ext. 2389

Jim Fiedler, Executive Project Mgr.
(408) 265-2607, ext. 2385

Scott Akin, Project Manager
(408) 265-2607, ext. 2391

June 5, 1996

WHAT'S WATER WORTH TO YOU?

Water District asks public to help plan Santa Clara County's water future

Will there be enough water in Santa Clara County's future? What are our options for keeping it flowing? How much are we willing to pay for it? Are we willing to endure more cutbacks like those during the 1987-92 drought?

Now's the time for residents concerned about our future water supply to explore these and other important questions. The Santa Clara Valley Water District will be holding three public meetings this month to discuss its long-range water supply project--the Integrated Water Resources Plan (IWRP)--and ask the public for feedback on water supply issues.

The IWRP project is based on the concept that a combination of water resource options--such as conservation, recycling and increased reservoir storage--would create sustained future water reliability. Selecting and evaluating options, then building them into a recommended strategy for the district's board of directors to review, is the project's goal.

To succeed, the IWRP must reflect community concerns. Public participation is therefore a crucial element of the IWRP process. The June public workshops will build on the ongoing involvement of a group of community, business, environmental and agricultural leaders that has been working closely with district staff since March. The final IWRP report will be presented to the district board in December 1996.

The June public workshops will take place at the following locations:

North County
Thursday, June 13, 7-9 p.m.
Santa Clara City Council Chambers
1500 Warburton Avenue
Santa Clara, CA 95050

Central San Jose
Wednesday, June 19, 7-9 p.m.
Isaac Newton Senter Auditorium
County Government Center
70 West Hedding Street
San Jose, CA 95110

South County
Thursday, June 27, 7-9 p.m.
Morgan Hill City Council Chambers
17555 Peak Avenue
Morgan Hill, CA 95037-4128

For more information on the meetings and the IWRP, please call (408) 265-2607, ext. 2227.

SANTA CLARA VALLEY WATER DISTRICT

News Release

Contact: Alison Russell
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Rick Callender
Local Government Liaison
(408) 265-2607, ext. 2017; pager (408) 951-7244

Jim Fiedler, Executive Project Mgr.
(408) 265-2607, ext. 2385
Scott Akin, Project Manager
(408) 265-2607, ext. 2391

June 19, 1996 **REMINDER: PUBLIC MEETING TONIGHT!**

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17555 Peak Avenue
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For more information on the meetings and the IWRP, please call (408) 265-2607, ext. 2227.

SANTA CLARA VALLEY WATER DISTRICT

Public Service Announcements
Run dates: June 10 - 27, 1996

Contact: Alison Russell
Public Information Representative
(408) 265-2607, ext. 2389

Note: Please run these PSAs this week and throughout the month of June, deleting dates of meetings that have already occurred. Thank you.

:15

What's water worth to you? If you care about water for the next generation, the Santa Clara Valley Water District wants to know. Bring your questions on our future water supply to a public meeting on June 13, June 19 or June 27. Call (408) 265-2600 for more information.

:30

What's water worth to you? The Santa Clara Valley Water District wants to hear from county residents who are concerned about our community's future water supply. Bring your questions and opinions and come to a public meeting on June 13, June 19 or June 27. You'll learn about the district's long-term water supply plan, and can sign up to get more involved. If you care about water for the next generation, now's the time to show it. Call (408) 265-2600 for more information.

Public Information Officer
Teddy Morse

Santa Clara Valley Water District

NEWS RELEASE

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Date: Nov. 13, 1996

Ever wonder if there will be enough water in the future?

Just a few years ago a severe drought challenged our community's ability to conserve water. And projections indicate that by 2020, our region could experience a water supply shortfall of up to 100,000 acre-feet during future severe droughts. That's almost a third of what Santa Clara County now uses in one year.

Fortunately, the Santa Clara Valley Water District has been working hard on a plan for a continued high-quality, long-term water supply for Silicon Valley--and we're eager to share it with the public.

On Wednesday, November 20, 1996, we'll present the draft recommended water supply strategy of our Integrated Water Resources Plan (IWRP) at a public meeting. We look forward to responding to questions and comments from the community before we present the plan to our Board of Directors on December 10, 1996 for further action.

What: Public meeting on long-term water supply for Santa Clara County
When: Wednesday, Nov. 20, 1996
Time: 7 p.m. to 9 p.m.
Where: Santa Clara Valley Water District, Board Room
5750 Almaden Expressway
San Jose, CA 95118

ALSO: Board of Directors meeting
When: Tuesday, December 10, 1996
Time: 9 a.m.
Where: Santa Clara Valley Water District, Board Room
5750 Almaden Expressway
San Jose, CA 95118

- MORE -

What's the IWRP? The IWRP was launched by the district board in March 1996 to respond to changing water supply conditions, including: the 1987-1992 drought; changing state and federal environmental regulations, which restrict the district's imported water deliveries; and projected demand and growth.

The essential work of the IWRP has been to shape a flexible strategy for meeting future water supply needs that also meets community and district objectives. Such objectives include: making the most effective use of our water supply; being able to respond to changing conditions; minimizing rate impacts; including public involvement; maximizing source water quality; and avoiding impacts to habitat or ecosystems.

A crucial element in the IWRP process is the inclusion of community involvement. "Stakeholders," including the general public; representatives of community, business and environmental groups; and local city and agency officials, worked together with the district during the plan's 10-month initial planning phase. A core stakeholder group of 20 individuals met five times throughout the process to help identify key water supply components and review and comment on staff's water supply strategy development. Stakeholder feedback will be incorporated into the draft preferred strategy and the draft final report.

The IWRP's draft preferred strategy is a combination of water supply components that, together, best satisfy the greatest number of planning objectives. Built on a foundation of "core elements"--work already planned by the district to address water supply issues--the strategy phases in other components as demand warrants. These components include: water banking (stores wet-year district supplies out-of-county for use in dry years); expanded non-potable water recycling (reuse of wastewater for irrigation); increased demand management (water conservation); and long-term water transfers (purchase of additional imported water to supplement contract supplies).

Additional, contingency actions could be activated if components either exceed or fail to meet expectations, or if unforeseen events require adjustments to the preferred strategy. Such actions could include: additional non-potable recycling; indirect potable recycling (highly treated wastewater blended in a reservoir for subsequent groundwater recharge or delivery to a treatment plant); additional demand management; additional water banking; additional long-term transfers; and additional surface storage (new in-county or out-of-county reservoir).

For additional information on the IWRP plan, please call Jim Fiedler at (408) 265-2607, ext. 2080; Alison Russell at ext. 2389; Scott Akin at ext. 2060; or Diane Moore at ext. 2061.

The Santa Clara Valley Water District is the water resource management agency that serves the wholesale water supply and flood protection needs of Santa Clara County's 1.6 million residents.

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Date: Dec. 10, 1996

District Board Accepts Community-Supported Water Supply Plan

Santa Clara County's water supply looks good for the next 20 years--thanks to a new, long-term plan accepted unanimously by the Santa Clara Valley Water District Board of Directors today. The Integrated Water Resources Plan, or IWRP, was developed over the last 10 months in response to board members' concerns for maintaining water supply reliability into the future.

If the county enjoyed only average to wet years for the next few decades, current water supplies could probably meet demand. However, district projections indicate that in future severe droughts Santa Clara County could experience a water supply shortfall of 100,000 acre-feet--almost a third of current water use. The IWRP addresses this potential water supply gap.

Community involvement has been a crucial element in the IWRP process. In particular, a 20-member "stakeholder" group representing the general public; community, business and environmental groups; local cities and agencies worked closely with the district to construct the plan's preferred strategy.

"Because of stakeholder participation, the IWRP reflects many community priorities, including reliability, flexibility, cost-effectiveness, and environmental awareness," said district General Manager Stan Williams. "Its strengths come from two main areas: public involvement and a reliance on a flexible 'menu' of potential supply sources."

MORE

2-2-2-2-2

The IWRP strategy includes programs based on four primary components--water banking, water transfers, water recycling and water conservation-- that will be phased into operation through the year 2020 in response to demand for water and availability of supplies. Updates to the plan are scheduled every three to five years and include ongoing stakeholder involvement and public outreach.

In addition, the plan features contingency actions, which would be triggered by future events such as unexpected changes in demand, emerging technologies, or partnerships with other agencies. Contingency actions include: additional non-potable recycling, conservation, water banking, or transfers; indirect potable recycling; or a possible new reservoir.

Some of the IWRP's components are already being implemented. For example, under a 1996 water-banking agreement with Semitropic Water Storage District in Kern County, the district can store up to 45,000 acre-feet of water for withdrawal through 2035. And as a result of stakeholder discussions, a potential partnership has been proposed between the district and local wastewater agencies to expand water recycling programs in the county. Such a partnership would not only benefit water supplies, but could also reduce excess levels of treated water discharge into the South Bay.

For additional information on the IWRP plan, or to receive a copy of the IWRP preferred strategy, please call Jim Fiedler at (408) 265-2607, ext. 2080; Alison Russell at ext. 2389; Scott Akin at ext. 2060; or Diane Moore at ext. 2061.

The Santa Clara Valley Water District is the water resource management agency that serves the wholesale water supply and flood protection needs of Santa Clara County's 1.6 million residents.

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IWRP Report

Integrated Water Resources Plan • Number 1, May 1996

Water district, community join in water supply plan

What is the IWRP?

The IWRP, or Integrated Water Resources Plan, is a process for mapping out Santa Clara County's long-term water supply program One of its most important elements is strong community involvement. As part of this plan, members of the general public, elected officials, business leaders, agricultural, environmental and community representatives will join the Santa Clara Valley Water District to help evaluate several water supply options and strategies. Their opinions will be included in a final report to the district's Board of Directors in December 1996. The directors will then study the report and its recommendations before deciding on a final plan to ensure continued water supply reliability into the next century.

Why is the IWRP needed now?

The district's last comprehensive water supply plan, or master plan, was published in 1975. It identified the need to supplement the county's water supply with additional imported water, and documented facilities that would be required to meet that need Many of the master plan's recommendations have been implemented. However, since 1975 events have taken place that dramatically underscore the need for an updated, responsive and more flexible water planning process.

- ***A severe drought, from 1987-92.***
  During six years of sparse local rainfall, available supplies could not meet county water demands Communities responded by implementing residential and commercial water-use restrictions and intensive water conservation programs, achieving conservation rates between 10 and 28 percent. Occasional droughts are a fact of life in our semi-arid climate In future severe droughts, the county could experience water shortages of up to 100,000 acre-feet, according to district projections One acre-foot, or approximately 326,000 gallons, is the amount of water two families of five use in a year, on average.

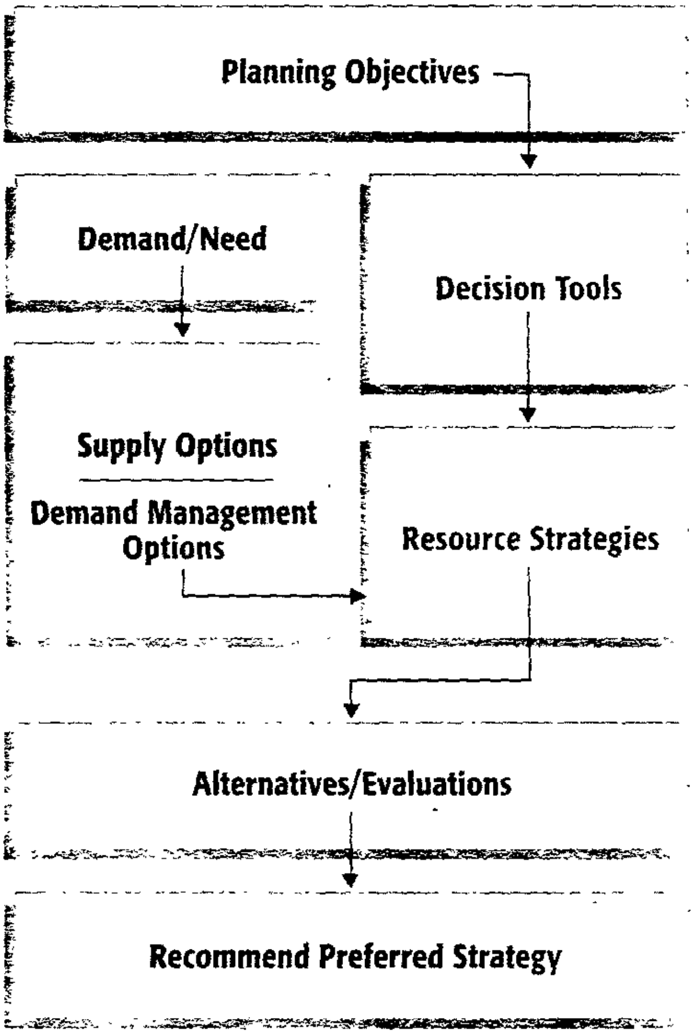
> ***The IWRP process is shaped by the premise that a wide array or combination of water resource options could meet the district's desired goals, and that any selected strategy must respond to community concerns in order to succeed. Options likely to be discussed in the IWRP process include: water conservation, water recycling, surface and groundwater storage and water transfers.***

- ***Increasingly stringent state and federal requirements to protect the environment in the Sacramento/San Joaquin Delta, resulting in reduced imported water deliveries.***
  Sources of Santa Clara County's water include local groundwater and surface water, imported water from the State Water Project, the federal Central Valley Project and San Francisco's Hetch-Hetchy system; and reclaimed water. In 1995, 43 percent of Santa Clara County's water came from local sources; 57 percent from imported sources (percentages vary from year to year, depending on climatic conditions)

continued on page 2

Santa Clara Valley Water District

Planning Process



continued from page 1

Recognizing the changing environment illustrated by these events, the board identified a long-term, reliable water supply as an ongoing top priority for the district. Board members chose the IWRP process as the best way to make short-term water supply decisions and address long-term factors, potential changes and uncertainties that may influence the future of the county's supply.

IWRP Building Blocks

As IWRP participants work towards a selected water resources strategy, they will help the district define planning objectives, define the need for additional water resources, identify and characterize water supply and demand management options, assemble options into resource strategies, and evaluate and recommend the preferred strategy.

After the process has been documented in a report to the district board, district staff will prepare a two- to three-year action plan to identify any areas of future work necessary to implement the selected strategy, and to develop a contingency plan to respond to future unanticipated events.

IWRP Objectives

IWRP stakeholders use 13 objectives endorsed by the district board (see chart at right) to evaluate water resource options and strategies discussed during the IWRP process.

In work accomplished thus far, stakeholders have grouped common objectives under five categories that reflect operational, risk, economic, community and environmental values.

Stakeholders are developing criteria to evaluate how well the various alternatives satisfy the objectives.

Objectives	*Objective Categories*
1. Provide Equal Reliability of Water	**Operational**
2. Maximize Flexibility	
3. Maximize Multipurpose Potential	
4. Level of Service	
5. Minimize Risk of Providing Supplies	**Risk**
6. Minimize District Costs	**Economic**
7. Minimize Rate Impact	
8. Protect Economic Well-Being of County	**Community**
9. Include Public Involvement & Maximize Acceptance	
10. Maximize Opportunities for Recreational & Environmental Uses	
11. Ensure Water Quality	
12. Promote Efficient Water Use	
13. Avoid or Minimize Adverse Impacts to Habitats or Ecosystems	**Environmental**

How the IWRP process affects you

A "stakeholder" involvement process is a crucial part of the IWRP A stakeholder is any individual who will be affected by or has an interest in the long-term water supply plan "External" stakeholders include the general public, businesses, community and environmental groups, water companies and farmers "Internal" stakeholders, or district staff, provide technical background and review water supply options for accuracy, consistency with district programs and cohesion with district policies

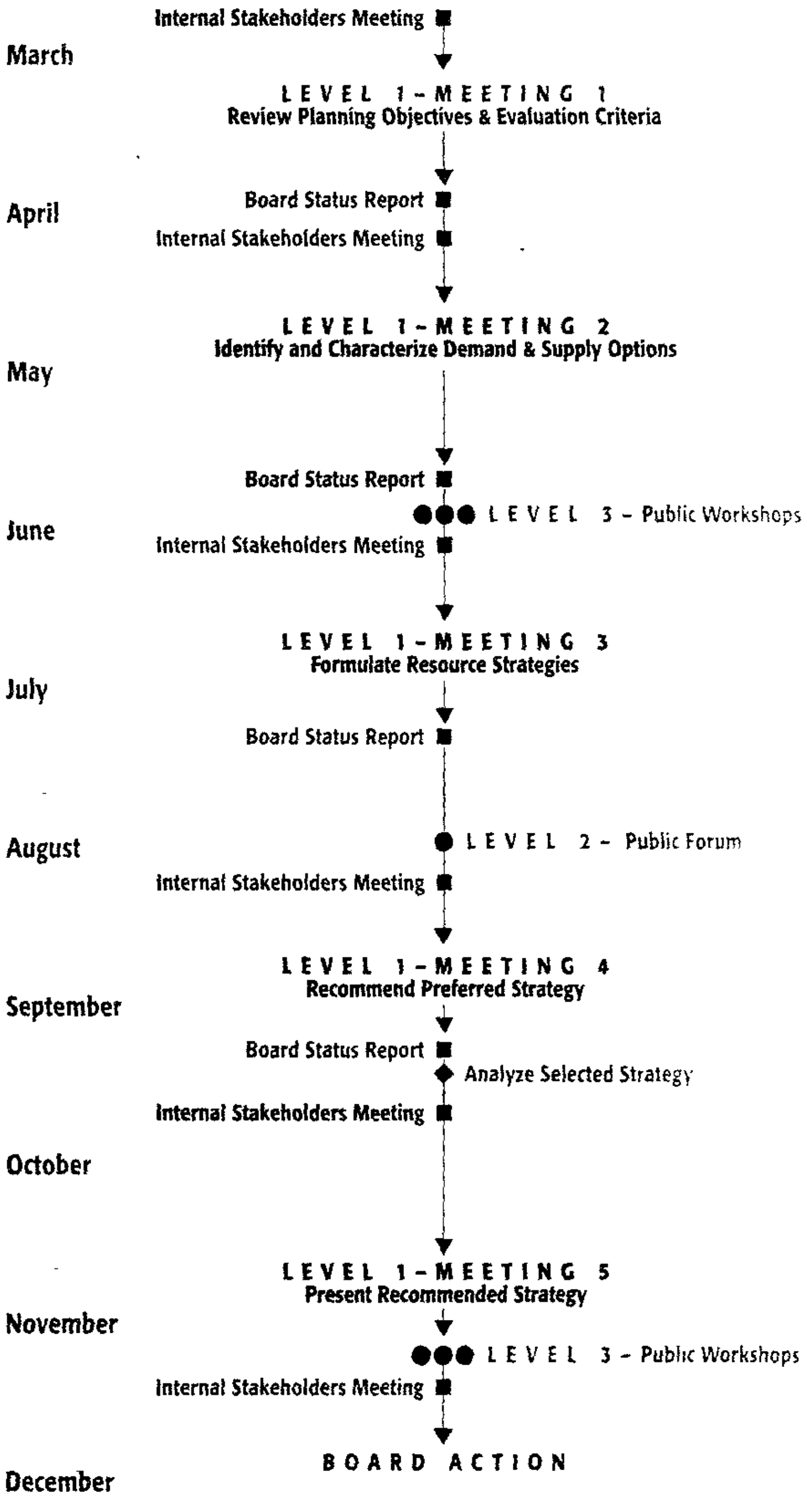
The IWRP process solicits stakeholders' views on water supply options—for example, new reservoir construction or desalination technology—and on programs that manage water demand (for example, water conservation practices), so as to create a water supply plan that truly reflects community goals and priorities

In the district's IWRP process, stakeholders participate on three levels (see chart at right) The first, or core, level is a focused group of community and business representatives who work closely with district staff during five meetings over the project lifespan. The second level is an expanded group representing broad community interests who participate during an intensive, all-day workshop. The third level is the general public, who are invited to learn about and contribute to the process through six meetings held throughout the county. The general public also is invited to participate in the Level II workshop, and is welcome to attend the Level I meetings.

IWRP Schedule & Timeline

The IWRP process began in March 1996 and will unfold over a 10-month period, ending in December 1996. Regular meetings, newsletters and status reports to the district board will help ensure active community participation.

IWRP Stakeholder Involvement Process



March
- **Internal Stakeholders Meeting**
- **LEVEL 1-MEETING 1**
  Review Planning Objectives & Evaluation Criteria

April
- **Board Status Report**
- **Internal Stakeholders Meeting**

May
- **LEVEL 1-MEETING 2**
  Identify and Characterize Demand & Supply Options

June
- **Board Status Report**
- ●●● LEVEL 3 - Public Workshops
- **Internal Stakeholders Meeting**

July
- **LEVEL 1-MEETING 3**
  Formulate Resource Strategies
- **Board Status Report**

August
- ● LEVEL 2 - Public Forum
- **Internal Stakeholders Meeting**

September
- **LEVEL 1-MEETING 4**
  Recommend Preferred Strategy
- **Board Status Report**
- ◆ Analyze Selected Strategy
- **Internal Stakeholders Meeting**

October

November
- **LEVEL 1-MEETING 5**
  Present Recommended Strategy
- ●●● LEVEL 3 - Public Workshops
- **Internal Stakeholders Meeting**

December
- **BOARD ACTION**

The IWRP Report is published by the Santa Clara Valley Water District

Board of Directors
Rosemary Kamei
District 1

Tony Estremera
District 2

Robert Gross
District 3

Larry Wilson
District 4

James Lenihan
District 5

Joe Judge
At Large (North County)

Sig Sanchez
At Large (South County)

General Manager
Stan Williams

Assistant General Managers
Kay Whitlock, Robert Smith

IWRP Executive Project Manager
Jim Fiedler

Writer/Editor
Alison Russell
Public Information Representative

June Public Meetings

Three informational public meetings will be held in June. All county residents are invited to learn more about the IWRP process and become involved in planning the county's long-term water supply. The meeting times and locations are:

- **North County**
  Thursday, June 13, 7-9 p.m.
  Santa Clara City Council Chambers
  1500 Warburton Ave.
  Santa Clara, CA 95050
- **Central San Jose**
  Wednesday, June 19, 7-9 p.m
  Isaac Newton Senter Auditorium
  County Government Center
  70 West Hedding Street
  San Jose, CA 95110
- **South County**
  Thursday, June 27, 7-9 p.m
  Morgan Hill City Council Chambers
  17555 Peak Avenue
  Morgan Hill, CA 95037-4128

For more information

The Santa Clara Valley Water District values public input on all its projects. If you would like to get more involved in the IWRP process, would like more information, or would like to be included on the IWRP mailing list, please call (408) 265-2607, extension 2227. For information on other district programs and events, please call (408) 265-2600 and ask for the public information office.

About the Santa Clara Valley Water District

The Santa Clara Valley Water District is a voter-approved special district responsible for wholesale water supply and flood protection in Santa Clara County. It is governed by a seven-member Board of Directors, five directors are elected, one from each of the county supervisorial districts, and two are appointed by the Santa Clara County Board of Supervisors. The district serves the 1.6 million residents of the county, its service area encompasses all of the county's 1,300 square miles.

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IWRP Report

Integrated Water Resources Plan • Number 2, August 1996

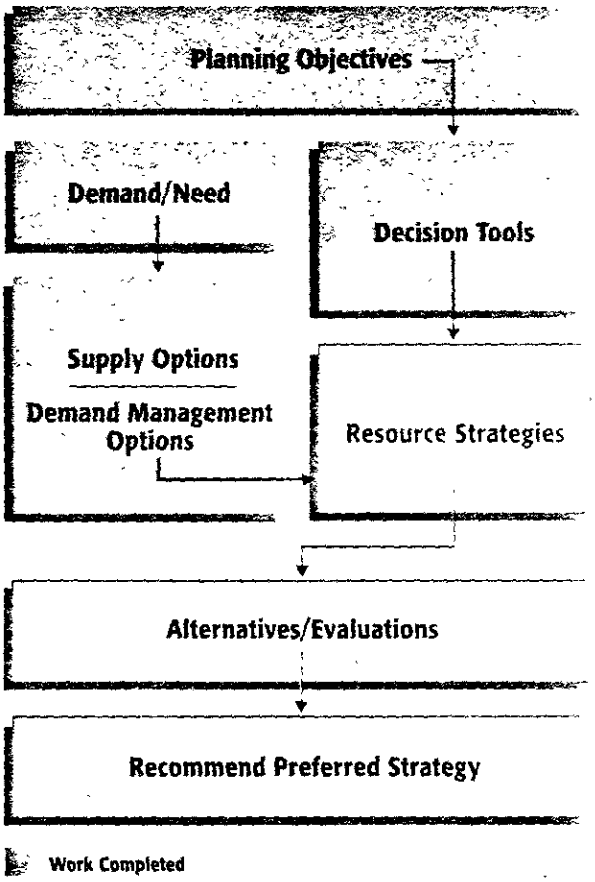
District weighs future water supply options

IWRP moves into next phase

Finding solutions to Santa Clara County's long-term water supply needs is the goal of the Integrated Water Resource Plan (IWRP), launched by the Santa Clara Valley Water District in March 1996. A top district priority, the plan addresses the following forecast: that by 2020, the county could experience a water supply shortage of 100,000 acre-feet—based on current supplies, projected growth and likely dry periods (one acre-foot, or about 326,000 gallons, is the amount two families of five use in a year, on average).

At the district, we're determined to develop solutions to this forecast and keep high-quality water flowing in Santa Clara County—with the community's help. Because the district's long-term water supply plan will directly affect everyone who lives or works in the county, public participation in its development is crucial. Members of the general public, elected officials, business leaders, and community representatives have already joined our effort as "stakeholders" to help map out potential water supply strategies (see p.3 for more information). These stakeholders are helping the IWRP project reach its goal: to recommend a preferred water supply strategy in a final report to the district's Board of Directors in December 1996. The board will study the report's recommendations before deciding on a final future water supply plan.

IWRP Planning Process



What's happened so far?

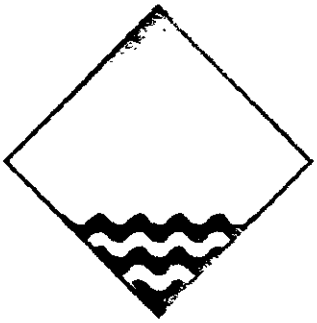
The chart at right shows the "building blocks" of the IWRP process. The shaded portions represent completed work. Here's a quick summary. In March 1996, the district board's 13 **planning objectives** were presented to IWRP participants to use as **decision tools** in evaluating water supply options. These objectives were then grouped into five categories

continued on page 3

Thematic Strategies

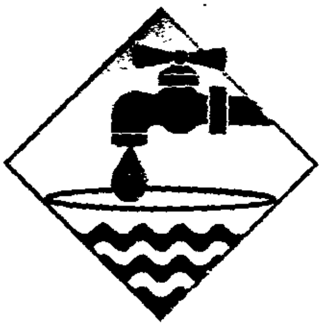
Representing a full range of possible solutions to future water demand, the following eight strategies each emphasize individual themes, as illustrated by the icons below.

Core Elements ***Each strategy incorporates "core elements," or work the district has already planned to address water supply issues. These elements include: adopted conservation and recycling programs; continued access to existing imported water contracts; water treatment plant expansion and capacity upgrades; and additional groundwater recharge.***



Baseline

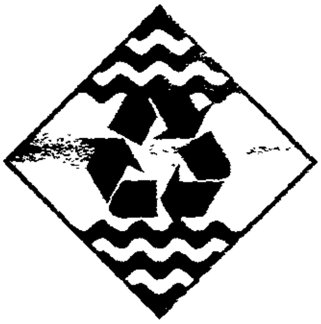
Assumes all core elements are implemented, but offers no additional water supply options. Has low cost and moderate environmental impacts, but could result in severe shortages in drier years.



Demand Management

(aggressive water conservation program)

Assumes additional water savings of about 35,000 acre-feet from conservation program. Public acceptance is uncertain. Could result in severe shortages



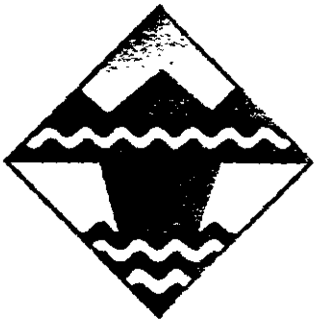
Water Recycling

(potable and non-potable)

Uses about 37,000 acre-feet of non-potable (non-drinkable) and 60,000 acre-feet of potable (treated for drinking) water per year, to be blended in existing reservoirs and either stored in the groundwater basin or sent through treatment plants for delivery. Shortages unlikely. High cost to implement; however, cost sharing with cities could reduce district costs. Minimal environmental impact. Public acceptance uncertain.

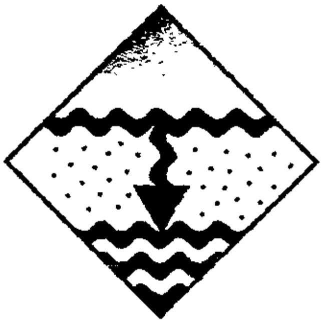
Maximize Local Storage

Includes construction of a new, 28,000-acre-foot South County treatment plant, and expansion of the Rinconada plant's capacity to 134,400 acre-feet. Would prioritize use of imported water in average and wet years, and store surface and groundwater for use in drier years. Improves South County water quality. Severe shortages could occur in drought years. Moderate cost impact; minimal environmental impact. Public acceptance probable



ew Reservoir

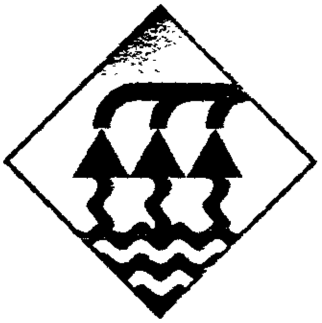
vides drought-year protection
storing imported water in new,
,000 acre-foot reservoir (location
etermined). Moderately high cost
nplement. Potential difficulty in
ining construction permits. Results
w recreational opportunities,
icant environmental impact
: acceptance uncertain.



Water Banking

(saves district water in out-of-county facility)

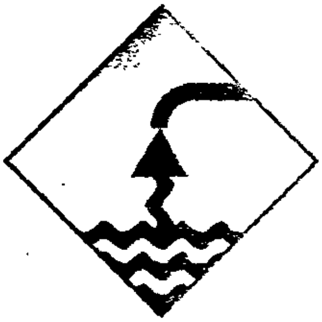
Stores 550,000 acre-feet of excess district wet-year supplies outside of county for use in dry years. Some shortages; low cost; minimal environmental impact; probable public acceptance.



Long-term Transfers

(buys water from outside county)

Provides an additional 100,000 acre-feet of water purchased from outside the county. Shortages unlikely; however, locating such a large amount of water in dry years could be difficult. Moderate cost and rate impacts. Little local environmental impact; possible third-party impact. Public acceptance likely.



Short-Term Transfers

(as-needed transfers)

Relies on dry-year purchases of water from outside the county. Low costs, probable public acceptance, although anticipated required rationing of 15 percent is likely. Little environmental impact.

continued from page 1

Operational (affecting district operations), Risk (affecting the district's ability to provide water); Economic (affecting district and community costs), Community (affecting the public in economic, recreational, water quality, water use and community acceptance areas); and Environmental

Next, district staff identified the county's future water supply needs—or **demand/need**—with the year 2020 as the planning horizon Based on factors including water use patterns, regulatory requirements, population and economic growth, staff projected annual demand for water by the year 2020 to fall within the range of 350,000 to 500,000 acre-feet. In 1995, the county consumed about 346,000 acre-feet

To meet this projected future demand, IWRP participants began in June to study future **supply and demand management options**, including water conservation, water recycling, surface and groundwater storage, and water transfers IWRP participants are currently evaluating these options, then developing them into **resource strategies** that address different water supply themes (see p 2) Work on the resource strategies will be completed in September 1996

Stakeholder Involvement

A stakeholder is any individual who will be affected by or has an interest in the district's long-term water supply plan. Stakeholder participation is crucial to the IWRP planning process; consequently, three levels of stakeholder involvement are integrated into the plan.

Level I: Core Group

The Level I stakeholders are a core group of community and business representatives who are working closely with the district to review and validate the IWRP process over its lifespan. In three meetings thus far—one each in March, May and July—core group members have stressed the importance of water reliability, quality, cost, and efficient water use as some key concerns They've also given guidance to district staff in developing hybrid strategies. The Level I group will meet twice more, once each in September and November, to evaluate hybrid strategies and assist in identifying a preferred strategy.

Level II: August 5 Public Forum – NEXT MEETING!

Representing broader community interests, an invited group of Level II stakeholders will meet during a public forum on August 5, 1996, at the Santa Clara Convention Center. The all-day, interactive session aims to identify how the community ranks different water-related issues, and to evaluate how the eight resource strategies address those issues See below for more information.

Level III: General Public

Level III is made up of interested community members. At three Level III workshops in June, members of the public expressed strong support for the IWRP process, and identified water recycling, environmental mitigation, local storage and water quality as some key concerns. Level III stakeholders who would like to be further involved in the IWRP process are welcome to attend the August 5 forum (see back page). The IWRP final report and recommendations will be presented to Level III stakeholders at a public meeting in December 1996.

What's ahead?

Developing "hybrid" strategies

The thematic strategies on p 2 were developed to fully explore whether any one approach could adequately meet future water needs. After analyzing the strengths and weaknesses of each thematic strategy, district staff and IWRP participants determined that a mix of components from among the thematic strategies will best satisfy IWRP objectives and meet future demand.

In the next phase of the IWRP process, participants will develop a second group of improved or "hybrid" resource strategies. These strategies will incorporate elements from the thematic group to provide a balanced solution to the district's future water supply needs The hyb strategies will also yield a preferred strategy to be presented to the dist Board of Directors in December 19

The IWRP Report is published by the Santa Clara Valley Water District

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At Large (South County)

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Assistant General Managers
Kay Whitlock, Robert Smith

IWRP Executive Project Manager
Jim Fiedler

Writer/Editor
Alison Russell
Public Information Representative

Contributing Writers/Consultants
EDAW, Inc

For more information or to get involved

If you would like to attend the August 5 forum, would like more information, or would like to be included on the IWRP mailing list, please call (408) 265-2607, extension 2227 For information on other district programs and events, please call (408) 265-2600 and ask for the Public Information Office.

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APPENDIX E
RESULTS OF OPTIONS SCREENING

APPENDIX E
RESULTS OF OPTIONS SCREENING

This appendix contains the ratings that District staff ascribed to the supply and demand management options described in Chapters 6 and 7.

OBJECTIVES USED FOR SCREENING

Options were rated according to how well they satisfied five key IWPR planning objectives:

- Maximize System Flexibility
- Minimize Risk of Providing Supplies
- Minimize District Costs
- Maximize Quality and Treatability of Source Water
- Avoid or Minimize Adverse Impacts to Habitat or Ecosystems

If an option met the planning objective well, it rated high; if an option met the planning objective poorly, it rated low. A nine-point rating system was created by allowing raters to modify ratings with pluses (+) and minuses (-). Options were rated relative to one another.

The screening results appear in Table E-1.

Table E-1:Options Screening Result

Options	Operation		Environmental		Risk		Community		Economic	
	Rating Result	Average	Rating Result	Average	Rating Result	Average	Rating Result	Average	Rating Result	Average
Water Recycling										
Nonpotable Water Recycling	2H,2H-,3M+, 1L,	M+	1H,3H-,2M+ 1M,1L	M+	1H,1H-,3M+, 1M,1M-,1L+	M+	1M+,3M,2M-, 1L,1L-	M-	NA	NA
Indirect Potable Water Recycling										
Groundwater Recharge	1H,2H-,2M+, 3L+	M	3H-,2M+,2M, 1M-	M+	1H-,1M+,1M-, 2L+,3L	M-	2M+,2M-,3L, 1L-	L+	NA	NA
Surface Reservoir Blending	1H+,2H,1M+, 1M,1M-,1L+,1L	M+	1H,4M+,2M, 1L	M+	1H-,1M+,1M, 1M-,1L+,2L,1L-	M-	2M+,2M-,1L+, 2L,1L-	M-	NA	NA
Bay Area Regional Recycled Water Export Study	1H+,1H,4M, 1M-,1L	M	1H,1M+,4M 1L+,1L	M	1M,1M-,1L+, 2L,3L-	L	1M+,3M-,3L+,	M-	NA	NA
Desalination	2H+,2H,3H-, 1M	H	1H,1M-,3L+, 2L,1L-	L+	1H,1H-,1M, 1M-,3L,1L+	M-	1H,2H-,1M+, 2M,1L+,1L	M	NA	NA
Capturing Local Water Streamflows										
Stevens Creek *Enlarging Steven Creek Reservoir*	1H,1H-,1M, 2M-,1L+,2L	M-	3M,3M-,1L+ 1L	M-	1H-,2M,2M-, 2L+,1L	M-	1H-,3M+,3M, 1M-	M+	NA	NA
Alamitos Creek *Enlarging Calero Reservoir*	3H,1H-,1M+ 1M,2M-	M+	1M+,5M,1L+ 1L	M	2M+,4M-,2L	M-	3H-,1M+,1M. 1M-,1L+,1L	M	NA	NA
Uvas Creek										
Enlarging Uvas Reservoir	1H,2H-,2M+ 1M,2M-,	M+	1H-,2M+,5M	M	1H-,4M,3M-	M	2H-,5M,1L+	M	NA	NA
Divert Uvas Water To Elsewhere	3H,2H-3M	H-	1H-,2M+,5M	M+	1H-,4M,3M-	M	2H-,5M,1L+	M	NA	NA
Inflatable Dam	1H+,2H,3H-, 2M+	H-	4H,1M+,1M 1M-,1L+	M+	1H+,2H,1H- 2M,1L-	M	1H,1H-,5M, 1M-	M+	NA	NA
Additional Groundwater Storage	1H,5H-,1M+, 1M	H-	1H-,4M,2M- 1L-	M	2M-,4L+,2L	L+	1H,1M+,3M, 2M-,1L	M	NA	NA
Additional Surface Storage										
Anderson Reservoir Expansion	1H+,2H,3H- 1M+,1M	H-	1M,4M-,2L+, 1L	M-	1M+,2M,1M- 1L+,3L	M-	1H-,2M+,4M, 1M-	M	NA	NA
New In-County Reservoir	1H+,4H,1H-, 1M+,1M	H-	2M,2L,4L-	L	1H-,1M,1M-, 3L+,2L	M-	1H-,3M+,4M	M+	NA	NA
Los Banos Grande Reservoir	1H+,3H,3H-, 1M+	H	2M,3M-,3L	M-	1M+,2M,2M-, 2L+,1L	M-	2H-,4M+,2M	M+	NA	NA
Upper Del Valle Reservoir	1H-,4M+,3M-	M	3M,1M-,4L	L+	6L+,1L,1L+	L+	1H,1H-,2M+, 3M,1L+	M+	NA	NA
Water Banking Program	3H+,1H,2H-, 1M+,1M	H	1H+,2H,2M+, 3M	H-	1H,1M+,2M, 1M-,2L+,1L	M	7M,1M-	M	NA	NA
Long-Term Water Transfers	1H+,1M+	H	1H-,1M-	M+	1M-,1L	L+	2M	M	NA	NA
Short-Term Water Transfers										
Short-Term Water Transfer	3H,3H-,1M+, 1M	H	3H-,1M+,4M	H-	1H-,1M+,2M, 1M-,3L+	M	7M,1M-	M	NA	NA
State Drought Water Bank	1H+,2H,3H- 2M	H-	2H,4H-,1M+ 1M	H-	1H,2H-,2M+, 1M-,2L+	M+	1H,1M+,5M, 1M-	M	NA	NA
Change To Water System Operation										
Prioritize Imported Water Over Local Water	1H,1H-,4M, 1M-,1L+	M	3H-,3M,1M-, 1L+	M	1H,1M+,3M-, 1L+,1L,1L-	M-	1H,1M+,3M, 2M-,1L+	M	NA	NA
Storing Excess Imported Water In A Local Reservoir	1H,2H-,3M+ 1M,1M-	M+	2H,1M+,3M 1M-,1L+	M+	1H-,1M+,1M, 1M-,4L+	M+	2M+,5M,1M-	M	NA	NA
Coordination With SFWD For Greater Utilization of Hetch-Hetchy Supplies	1H,4H-,2M+, 1M	H-	3H-1M+,4M	M+	2H-,1M+,3M-, 2L+	M	1H,5H-,1M+, 1M-	H-	NA	NA
Demand Management Program 1	3H-,1M+,1M-	M+	2H,1H-,1M+,1M	M+	2H,2H-,1M-	H-	1H,2H-,1M,1M+	M+	NA	NA
Demand Management Program 2	3H,1M+,1M-	M+	2H,1M-,2M+	H-	3H-,1M+,1L+	M+	3H-,1M,1M-	M+	NA	NA

NA: At the time the component screening was conducted, economic data for these components were not available

APPENDIX F
EVALUATION OF THEMATIC WATER RESOURCE STRATEGIES

APPENDIX F
EVALUATION OF THEMATIC WATER RESOURCE STRATEGIES

This appendix explains the ratings District staff gave to each of the thematic strategies. Strategies were rated according to how well they satisfied each of the 13 original IWRP planning objectives. (Objectives 3 and 7 were added subsequent to this evaluation.)

If a strategy met the planning objective well, it rated high; if a strategy met the planning objective poorly, it rated low. A nine-point rating system was created by allowing raters to modify ratings with pluses (+) and minuses (-). Strategies were rated relative to one another. A tabular summary of the ratings for each strategy is presented in Table F-1.

The resource strategies and their ratings are described in Chapter 8.

Thematic Strategy 1
BASELINE

Components
None beyond Core Elements

Operational

1	L+	Doesn't change how we deliver water—covered in Level of Service.
2	L-	No options—less water in storage to meet higher demands.
4	M	Status quo—no more or less flood control.
5	L-	Worst among all strategies. Worst Level of Service due to magnitude of shortages.

Risk:

6	L+	No change; system would run dry during shortages and/or there would be very high risk of subsidence.

Economic:

8	H+	District is not spending anything other than public relations dollars in the event of shortages.
9	L	*In shortages, would be selling less and less* water, requiring higher and higher unit price to meet District costs; thus rates could increase significantly for periods of time—fluctuating and volatile.

Community

10	L-	Public/business confidence disaster—no response to known shortage potentials.
11	L-	Total system failure during droughts is least acceptable to public, not to mention adverse impact on confidence in the District as a public agency.
12	L	Reservoirs are severely drawn down; there are minimal stream releases = adverse impact on recreation and environmental uses.
13	M-	Groundwater draw-down could increase nitrate problems, especially in South County.
14	M-	Includes some recycling in the baseline. But no real encouragement to be more efficient or inefficient.

Environmental

15	M	Lower streamflows and reduced shoreline edge during drought; not unlike some natural cycles; not the type of impact associated with new reservoirs.

Thematic Strategy 2
DEMAND MANAGEMENT

Components

Demand Management Program 2 saves 34,700 af/year
(includes graywater elements, subsequently dropped from program)

Operational

1	M+	Unloads some demand, increasing ability to get water to all customers; potable water that does not get served can be distributed to other customers.
2	M+	Improves flexibility by reducing demand.
4	M	Status quo—no more or less flood control.
5	L+	Number and magnitude of drought events & rationing don't meet Level of Service goal; however, results in less frequent and lower magnitude of shortages than Strategy 1.

Risk

6	M-	Implementation risk—both acceptance and retention of this aggressive program is risky. Risk of poorly maintained graywater systems = potential health and safety problems.

Economic

8	H-	Relatively cheap for District.
9	L	Demand management cannot fill entire shortfall in a dry period, and higher rates will be necessary if demand management is not combined with another source of supply.

Community

10	L	Costs and commercial impact from shortages scare off potential business.
11	M-	Low public acceptance—forcing people to do things to conserve which are outside their comfort zone.
12	L+	Trail use is same, low stream flows, can't launch boats, recreation facilities out of water, no water in percolation ponds.
13	M	No impact; status quo—better than baseline due to moderation of the nitrate issue.
14	H-	Not quite as efficient as reclamation, but much more efficient than rationing.

Environmental

15	H-	Less water released from reservoirs for instream uses. Visual and aesthetic impacts on landscaping could improve by planting native species. Improve habitat. Recreation value for water in reservoir?

Thematic Strategy 3
RECYCLED WATER

Components
36,600 af/year of non-potable recycled water
60,000 af/year (5,000 af/month) of indirect potable recycled water for reservoir blending

Operational

1	M+	Takes pressure off system, reduces demand on potable system; same as Strategy 2; demands throughout the system are easier to meet.

2	H	Once in place, gives many different ways to deliver water. More control than Strategy 2; dependable.
4	M+	Improves external resource integration with wastewater disposal. Doesn't improve District operations but helps others.
5	H+	Meets Level of Service objective; no rationing.
Risk		
6	L+	Process reliability question in system because can't monitor. 100% RO technology. Key concern—low implementability/public acceptance due to RO. San Diego experience helps.
Economic		
8	L-	Very high cost to District (if District assumes 100% of cost).
9	L-	Costs would translate to higher rates.
Community		
10	M-	More expensive than water transfers—higher water rates, retrofits industrial customers, but economic well being of community is improved by increasing reliability of water supplies, especially during CDP.
11	L+	Hard sell for potable—easy for non-potable.
12	M+	Improves current variety of recreation: more water in Anderson which may result in higher water levels in some other reservoirs.
13	M	RO improves water quality but increases corrosiveness, lower TDS, TOCs.
14	H	More efficient use of all water resources.
Environmental		
15	H	Coyote steelhead temperature increase—big impact. However, assumes temp is not issue. Keeps impacts to minimum. No real problems with this strategy. High energy requirement; brine disposal.

Thematic Strategy 4
MAXIMIZE LOCAL STORAGE

Components

New 25 mgd treatment plant in South County
Expand Rinconada to 120 mgd
Prioritize imported water use

Operational

1	H	New treatment plant in South County makes surface water available; allows equal reliability for South County.
2	M+	Not as flexible as Strategy 3 since additional potable water is not made available for further distributions. Fewer options except in providing South County with surface water system.
4	M-	Reservoirs held high, reducing flood capacity in some locations; flood control curve is still maintained—only incidental storage impacts.
5	L	Very close to baseline, only slightly better.

Risk

6	M	Some permitting issues; no subsidence—take is not below threshold; groundwater retailers may not switch to surface water.

Economics

8	M	Mid-level costs.
9	M	Mid-level rates.

Community

10	L+	Giving surface water to South County is a benefit, except in drought—no water given.
11	M	Benefits would be greater in South County—under current benefit/cost assumptions, they will pay more.
12	M-	No change.
13	H-	An improvement—especially in South County. Provides high quality water, improves South County nitrate problem. North county may not want Delta water but, switching between groundwater and surface water may cause "red water."
14	M	No conservation or reclamation.

Environmental

15	H-	Minimal environmental impacts—assume instream recharge activities will have minimal fisheries impacts.

Thematic Strategy 5
NEW RESERVOIR

Components

New 550,000 af reservoir storage—in or out of County

Operational

1	M	No improvement in system reliability—water still enters system at same locations and is distributed through same system.
2	H-	Can trap all contracted water in storage—none lost.
4	M	No change from present.
5	M-	Does provide significant drought benefits once reservoir is full (i.e. in second drought—not in first drought of projection period, when reservoir is not full).

Risk

6	L-	Risk of implementability: low public acceptance and high permitting difficulty. May not be available on time.

Economics

8	L+	High capital and operating costs.
9	L+	Causes significant rate increase.

Community

10	L+	Still have shortages, compared with Strategy 2—expensive, without meeting demand.
11	M	Increased recreation opportunities counterbalanced by public opposition to new reservoirs—depends on location and resources affected.
12	H-	New recreation opportunities.
13	M+	Same water supply used to fill the reservoir—however, filled in wet years, when water quality is slightly better.
14	M	No conservation, no reclamation, beyond baseline.

Environmental

15	L	Possible inundation of existing vegetation, animals, plants and possible archeological sites a concern. Riparian mitigation likely. Possible impacts to downstream trout habitat.

Thematic Strategy 6
WATER BANKING

Components
Bank 550,000 af capacity (no transfers assumed; multiple banking agreements assumed)

Operational

1	M	Status quo: not reducing demand on system or added pipes.
2	M+	More control over water; turn spigot on and off. However, dealing with banking agreement could be restriction on use. More flexibility to respond to changing conditions.
4	M	Status quo.
5	M-	Meets Level of Service goal.

Risk

6	M-	Central Valley basin overdrafted; could be adjudicated—risk loss of investment/entitlement, at least in part or for a time. However, District would probably retain some proportion of entitlement during adjudication process. Balancing many things entering long-term agreement that hasn't been proven. Technically feasible, not institutionally proven; however, politically more palatable/implementable than surface reservoir.

Economic

8	M+	Relatively low-moderate cost.
9	M+	Rate impact not significant.

Community

10	M-	Less expensive but still involves shortages.
11	H-	Viewed positively—better than in-County storage due to fewer shortages; but shortages still occur.
12	M	Maintains recreation opportunities.
13	M	No change.
14	M	No change.

APPENDIX G
EVALUATION OF HYBRID WATER RESOURCE STRATEGIES

SUMMARY OF STRATEGY EVALUATIONS

Four strategies were evaluated by the project team:

1. Minimize Environmental Impacts
2. Maximize Flexibility to Meet Changing Demands
3. Maximize Local Reliability
4. Minimize Costs

Rather than take each strategy and show how it ranked for each objective (as was done for the thematic resource strategies), the project team ranked the strategies within each objective. The results are described below and shown in Figure G-1.

Objective 3: Maximize Effective Use of Water Supply

1. Minimize Environmental Impacts	H-
2. Maximize Flexibility to Meet Changing Demands	H
3. Maximize Local Reliability	H
4. Minimize Costs	M+

All of the strategies were seen as at least slightly more effective than the District's existing supplies or status quo operations. Strategies 2 and 4 were perceived as more efficient because their dry-year transfer component allows water to be taken only when needed. Strategy 3 combined low levels of conservation and non-potable recycling which was viewed as an effective use of supplies. Strategy 2, which combined banking with a dry-year transfer, was evaluated as very efficient and therefore rated high. Banking was viewed as an efficient use of water; therefore Strategies 1 and 2 rated high-minus and high. Strategy 4, although perceived better than current District operations, ranked last among the Strategies due to the lack of banking which would reduce the available options for storing transferred water.

Objective 7: Maximize Ability to Respond to Changing Conditions

1. Minimize Environmental Impacts	L+
2. Maximize Flexibility to Meet Changing Demands	M+
3. Maximize Local Reliability	H-
4. Minimize Costs	M-

Strategy 3 was evaluated as the most adaptable to changing conditions due to its diverse components. Although it rated the highest, Strategy 3 does require a large number of capital investments. The fact that the components for this Strategy are selected based on the goal of maximizing local reliability means that it should enable the District to more closely adapt to changing conditions.

Strategy 2 ranked medium-plus based on the fact that it includes banking and would not lock the District into a long-term transfer in which water is purchased every year. Strategies 4 and 1 were seen as the least flexible to changing conditions due to mandated aggressive conservation programs, and in the case of Strategy 1 a larger quantity of non-potable recycled water.

Objective 9: Minimize Rate Impacts

4) Minimize District Costs	M+
2) Maximize Flexibility to Changing Demands	M+
1) Minimize Environmental Impacts	M-
3) Maximize Reliability	L

A review of the rate impacts for the four strategies reveals that the monthly increase for a typical residential customer by year 2020 would be approximately $3 to $26 per month. This assumes a baseline cost per customer of approximately $66 per month by 2020. (Projected retail rates for each of the hybrid strategies are shown in Appendix H, Table H-5.)

Objective 11: Maximize Public Acceptance

1. Minimize Environmental Impacts	M
2. Maximize Flexibility to Meet Changing Demands	M+
3. Maximize Local Reliability	L
4. Minimize Costs	M-

Strategy 2 ranked highest due to the inclusion of a less aggressive conservation program, which would not include mandated measures, and is therefore perceived as more readily acceptable by the public. This strategy also includes dry-year transfers, which are viewed as flexible and therefore more acceptable.

Strategies 1 and 4 were ranked lower due to the inclusion of the more aggressive conservation Program 2, which would require mandated measures that could be difficult for the public to embrace. Strategy 1 includes non-potable recycling which is perceived as beneficial by the public; however, the cost for that component increases the cost of Strategy 1 to twice that of Strategy 2. Strategy 4 was ranked as a medium-minus because although it is the lowest-cost strategy, it also has the highest risk. Strategy 3 was ranked the lowest based on the eventual inclusion of indirect potable recycling and a new reservoir, which are still viewed by the public as risky with potential for large impacts.

Objective 13: Maximize Quality and Treatability of Source Water

1. Minimize Environmental Impacts	M-
2. Maximize Flexibility to Meet Changing Demands	H-
3. Maximize Local Reliability	L+
4. Minimize Costs	H-

Strategies 4 and 2 would have minimal impact on water quality due to the inclusion of transfers which would be delivered via existing supplies, i.e. the Delta. Strategies 1 and 3 pose a slight water quality risk due to the inclusion of non-potable recycling and the potential for contamination at cross connections. Strategy 3 has the highest risk and was therefore rated low-plus due to the inclusion of indirect potable recycling and the potential failure of consistent treatment. Although the technology is expected to improve, at this time indirect potable reuse is not a proven technology.

Objective 15: Minimize Environmental Impacts

1. Minimize Environmental Impacts	H
2. Maximize Flexibility to Meet Changing Demands	M+
3. Maximize Local Reliability	L
4. Minimize Costs	M-

Strategy 1 was rated the highest for this objective based on the inclusion of conservation Program 2 and non-potable recycling which would reduce demand for potable water by 57,000 af. Strategy 2 ranked next based on the inclusion of long-term transfers on an as-needed basis only.

APPENDIX H
ECONOMIC ANALYSIS OF HYBRID AND PREFERRED STRATEGIES

APPENDIX H
ECONOMIC ANALYSIS OF HYBRID AND PREFERRED STRATEGIES

This appendix explains the methodology used to determine how the hybrid strategies described in Chapter 9 and the preferred strategy described in Chapter 10 would affect District costs and water rates. It derives the life-cycle costs or each strategy and its components, and rate impacts for each strategy.

ANALYSIS OF STRATEGIES' IMPACT ON DISTRICT COSTS

Future costs to implement each component of the hybrid strategies were analyzed over the period from 1997 to 2020. The staging of components over time is portrayed in Chapter 9 (Figures 9-1 through 9-4). Staging was based upon the projected need for additional supplies and the necessary lead time to obtain permits and construct particular components.

The future costs of each component in a strategy were projected using a 5 percent rate of inflation for both capital and operating costs. For simplicity of discussion, the water supply components are assumed to be owned and operated by the District; however, it is expected that the District will share the costs of future recycling projects with the wastewater treatment plants. The approach taken shows the full costs to the county's wastewater treatment and water supply systems for pursuing a strategy without making any assumption as to the future allocation of costs. Thus, for the hybrid strategies that include recycling components (hybrid strategies 1 and 3), the projected costs and resulting rate impacts are an upper bound of the potential costs to the water supply system.

The water conservation practices in the demand management components require significant expenditures by end users and are included as community costs (as opposed to District costs) in the cost tables. These community costs are not included in the rate impacts of the hybrid strategies.

Component-Level Analysis

Table H-1 shows basic cost information for the demand management and water supply components included in the four hybrid strategies. The annual operating costs for the demand management components include expenditures by the District to manage the program and outlays by end users to invest in water-conserving equipment. For capital investments in the water supply components, the annual capital cost was calculated assuming that the initial investment was financed with revenue bonds issued for 30 years and paying 7 percent interest per year. The annual capital and operating costs were divided by the expected water supply production to derive a unit cost per af.

The basic cost information in Table H-1 was used to project the total capital and operating costs for the four hybrid strategies and the preferred strategy.

TABLE H-1
Capital and Operating Costs of Demand Management and Water Supply Components

Component	Dry Period Yield (af)	Capital Investment (millions of 1996 dollars)	Annual Costs (millions of 1996 dollars)		Unit Cost ($/af)
			Capital[1]	Operating	
Demand Management 1	11,000	0	0	3.3	300
Demand Management 2	25,000	0	0	5.6	224
Water Banking[2]	0 - 58,000	47.0	3.8	2.0	322
Long-Term Transfers (Entitlement)	60,000	126.0	10.2	6.0	270
Long-Term Transfers (Dry-Year Option)	60,000	0	0	7.0	116
Non-Potable Recycling	32,000	400.0	32.2	11.0	1,350
Indirect Potable Recycling[3]	35,000	265.0	21.4	23.0	2,500
Reservoir[3]	0 - 130,000	360.0	29.0	5.0	1,889

[1] Capital costs amortized over 30 years at 7 percent interest.
[2] Unit costs based on average deliveries of 18,000 af/year.
[3] Assumed to operate approximately 50 percent of time to keep operating costs down.

Table H-2 shows the cumulative capital and operating costs of each component in the four hybrid strategies and the preferred strategy, demonstrating how the particular components contribute to overall costs from 1997 to 2020. The community costs shown in this table arise from estimated expenditures by water users to implement the demand management component of each strategy. The demand management components rely on water users to spend three to four times the District's outlay. These community expenditures are in addition to costs anticipated under current water conservation programs, as well as costs that will be borne by the wastewater plants to complete non-potable recycling projects currently under way.

TABLE H-2
Capital and Operating Costs of Strategies by Component[1]
(millions of 1996 dollars)

	1 Minimize Environmental Impacts	2 Maximize Flexibility	3 Maximize Local Reliability[2]	4 Minimize Costs	Preferred Strategy
Demand Management 1	—	14	14	—	14
Demand Management 2	20	—	—	20	—
Water Banking	133	133	—	—	133
Long-Term Transfers	—	125	—	140	90
Non-potable Recycling	918	—	91	—	91
Indirect Potable Recycling	—	—	552	—	—
Reservoir	—	—	315	—	—
District Total	**1,071**	**272**	**972**	**160**	**328**
Community[2]	82	45	45	82	45
Total Strategy	**1,153**	**317**	**1,017**	**242**	**373**

[1] Total value of outlays to 2020 .

[2] Community costs arise from conservation expenditures by end users.

Strategy-Level Analysis

Table H-3 shows the total costs of the strategies over the years from 1997 to 2020 in terms of current or 1996 dollars, the escalated cost assuming 5 percent annual inflation, and the present value of the escalated cost using a discount rate of 8 percent per year.

As shown in the table, hybrid strategies 1 and 3 are roughly equal in current dollars, but hybrid strategy 3 is roughly one-third more costly in terms of escalated dollars because the investments are delayed to 2010 or later. The present value figures put all outlays on a common basis that shows the amount of money needed today to fund the future stream of capital and operating costs required by the strategy. The specific dollar figures are less important than the relative comparisons that provide a basis for evaluating the four strategies against each other.

The present value column in Table H-3 shows that the lowest-cost strategy is, in fact, hybrid strategy 4 ("Minimize Costs"); however, hybrid strategy 2 is a close second. Hybrid strategy 3 is considerably more costly than hybrid strategies 2 and 4, but more attractive than hybrid strategy 1.

TABLE H-3
Summary of Strategy Costs: 1997 to 2020
(millions of dollars)

Strategy	Current Cost (1996 dollars)	Escalated Cost (future dollars)	Present Value (escalated cost, discounted at 8%)
Preferred Strategy	373	627	213
1. Minimize Environmental Impacts	1,150	1,700	624
2. Maximize Flexibility	317	550	186
3. Maximize Local Reliability	1,017	2,120	568
4. Minimize Costs	242	500	151

ANALYSIS OF STRATEGIES' IMPACTS ON WATER RATES

The potential impact of each strategy on water rates is projected by showing the effect of each strategy on the average revenue required per af of District sales. Currently, the District receives approximately $230 per af. In 1996 dollars, average revenue per af is projected to increase to $240 per af in 2000, $250 per af in 2010, and $255 per af in 2020. Table H-4 shows these base case projections along with the revenue requirements per af for the four hybrid strategies and the preferred strategy. District revenue requirements in 2020 for the strategies to meet the need of 100,000 af were projected to range from approximately $280 per af to $460 per af or 10 percent to 80 percent over the base case.

TABLE H-4
Impact of Strategies on Unit Revenues[1]
(1996 dollars per af)

Year	Base Case	1 Minimize Environmental Impacts	2 Maximize Flexibility	3 Maximize Local Reliability	4 Minimize Costs	Preferred Strategy
2000	240	369	272	250	250	255
2010	250	393	290	385	280	290
2020	255	380	290	460	280	295

[1] Projected average revenue required per af of water supplied by the District.

The impact of increased District rates on a typical retail residential water bill is estimated for a household using 1,500 cubic feet per month. Residential bills in Santa Clara County vary from retailer to retailer, and $25.00 per month is representative of residential costs in 1996. This monthly bill is projected to increase to $25.75 per month in 2020, assuming that the retailers' water costs increase with the District's rates in 1996 dollars as shown in the base case of Table H-4.

The projections shown in Table H-5 indicate that hybrid strategy 4 would increase retail bills 5 percent over the base case projection for 2020. For hybrid strategy 3, the monthly bill is projected to increase by 40 percent over the base case. For the preferred strategy, the increase is 8 percent in 2020.

TABLE H-5
Projected Impacts on Monthly Retail Bills[1]
(monthly charge in 1996 dollars for 1,500 cubic feet)

Year	Base Case	1 Minimize Environmental Impacts	2 Maximize Flexibility	3 Maximize Local Reliability	4 Minimize Costs	Preferred Strategy
1996	25.00	25.00	25.00	25.00	25.00	25.00
2000	25.00	31.45	26.60	25.40	25.50	25.75
2010	25.50	32.70	27.50	32.30	26.95	27.50
2020	25.75	32.00	27.40	36.00	27.00	27.75

[1] Based on typical Santa Clara County monthly retail bill of $25.00 for 1,500 cubic feet in 1996.

APPENDIX I
IMPORTED WATER AND THE IWRP

APPENDIX I
IMPORTED WATER AND THE IWRP

This appendix describes the many statewide activities and initiatives that could affect the District's imported water supplies and related resource planning activities.

BASELINE IMPORTED WATER ASSUMPTIONS

While the District is exploring and developing various programs to secure the level of reliability assumed by the IWRP process, there are still significant external pressures to overcome. One of the program objectives in the CALFED Bay-Delta Program is to reduce the mismatch between Bay-Delta water supplies and current and projected beneficial uses dependent on the Bay-Delta system. Proposed water supply facilities may improve the ability to transport water through the Bay-Delta system as well as to store excess water in existing and new storage facilities. In addition, to the extent that the ecosystem restoration component of the CALFED Bay-Delta Program is successful in arresting the decline of species of concern and in restoring the health of the ecosystem, the need for additional restrictions on water exports may be reduced and supply reliability should improve. Such reliability improvements, however, will come at great expense to the District and will likely occur in the distant future. In addition, there are many uncertainties in the implementation of the CVPIA that may affect the District's CVP supplies.

TRANSFERS AND BANKING OPPORTUNITIES

There is wide recognition that water transfers and water banking are attractive options to improve supply reliability and to potentially provide additional supplies to areas with increasing demand. Legislative efforts are underway to facilitate transfers and banking as well as development of physical projects and facilities to increase transfers and banking opportunities. These and other related efforts should increase the security of these institutional arrangements and better protect the rights of all involved parties.

DRINKING WATER QUALITY IMPROVEMENTS

Another program objective of the CALFED Bay-Delta Program is to provide good water quality for all beneficial uses. Proposed source control measures and one of the alternative conveyance facilities could potentially improve the quality of the Bay-Delta water as a drinking water supply source to the District. The District will likely perform the necessary upgrades to improve its water treatment capabilities prior to full implementation of the CALFED Bay-Delta Program elements; these potential source water quality improvements are necessary to enhance the ability of water agencies to meet increasingly stringent regulatory requirements.

DEMAND MANAGEMENT AND WATER RECYCLING

One of the CALFED Bay-Delta Program elements is an efficient water use component which includes measures to reduce reliance on the Bay-Delta as a water supply source. These measures include demand management programs, water recycling, and conjunctive use. There is also a movement to require certain levels of implementation as a pre-condition for continued use of Bay-Delta supplies. Such mandatory requirements on demand management also exist as program elements of the CVPIA and proposed legislation on water transfers. The demand management and non-potable recycling programs included in the preferred strategy should put the District in good standing with these developing requirements.

POTENTIAL CATASTROPHIC OUTAGE OF IMPORTED WATER SUPPLY

One program objective of the CALFED Bay-Delta Program is to reduce the risk to water supply, land use and associated economic activities, infrastructure, and the ecosystem from catastrophic breaching of Delta levees. Levee improvement and maintenance measures should decrease the vulnerability of the Bay-Delta system to catastrophic outages. To the extent that conveyance and storage components of the program are also improved, supplies to export water users south of the Delta should be better protected from emergency outages.

APPENDIX J
DISTRICT'S DEMAND MANAGEMENT PROGRAM

APPENDIX J
THE DISTRICT'S DEMAND MANAGEMENT PROGRAM

The District's current demand management program includes residential, commercial/industrial, and agricultural program elements. Each of these is described in detail below.

RESIDENTIAL PROGRAM ELEMENTS

Showerhead Retrofits

In June 1992, the Board approved a 5-year showerhead retrofit program, which calls for 20,000 high-quality conservation kits/showerheads to be distributed to County residents every year through the retailers and special public events. Since program inception, approximately 50,000 water conservation kits have been distributed throughout the County.

Ultra-Low-Flush Toilet Rebate Program

Since August 1992, the Water Conservation Program, in conjunction with each of the 11 participating retailers, has been issuing rebates of up to $75 to residents in the County who replace their existing high water-consumptive toilets with efficient 1.6 gallon-per-flush ULFTs. Single family residents may receive up to three rebates per household. To date, over 45,000 rebates have been issued. The District's ULFT program is projected to reduce demand by 14,500 af/year by 2002.

In addition to the water retailers' individual marketing efforts, the District has developed regional marketing pieces, including a program brochure, a multi-family literature piece/folder, posters, and literature displays that are distributed and maintained in over 80 plumbing outlet, hardware and home improvement stores in the County.

Tumble-Action Washing Machine Rebate Program

Pacific Gas and Electric (PG&E), in partnership with the District, East Bay Municipal Utility District, and the City of Davis, is offering rebates from $150 to $225 to residents in their service territory who install approved tumble-action clothes washers. The District offers a $75 rebate, in addition to PG&E's rebate amount, to residents who install these water-efficient clothes washers in the County.

Water-Efficient Landscape Workshops

Offered each spring to County residents, the workshop series consists of three weekend morning classes that offer practical information on water-wise gardening. Workshop topics include landscape design, plant selection, efficient irrigation design and installation, and maintenance techniques.

Spanish Language Irrigation Training

These workshops provide hands-on training for Spanish-speaking landscape professionals on irrigation controller programming, system scheduling and irrigation troubleshooting. This seminar is co-sponsored by irrigation equipment manufacturers. Each class of 30 landscape professionals typically maintain over 400 sites in the County.

APPENDIX K
IWRP MODELING ASSUMPTIONS

- The District's three water treatment plants were operated at capacity every year. To balance the west side groundwater basin the Rinconada WTP had to be expanded to 100 mgd. The annual capacities of the treatment plants were Rinconada, 81,000 af; Penitencia, 35,000 af, and Santa Teresa, 74,000 af.

Assumptions Used to Model the Water Supplies

- State Water Project (SWP) Entitlement = 100,000 af/year.
- Central Valley Project (CVP) Entitlement = 130,000 af for M&I uses and 22,500 af for agricultural uses.
- Hetch-Hetchy = historical deliveries into the County.
- The reduction in deliveries from the SWP as calculated by the DWR to comply with the 1994 December accord on the Bay-Delta.
- The CVP M&I preference policy which maintains a 75 percent floor for a minimum delivery.

Priority of Use of Supplies

- Hetch-Hetchy water and nonpotable recycled water.
- Local water stored in existing reservoirs.
- Imported water, first SWP and then CVP.
- Additional water stored in a new reservoir or in a banking program.
- Water stored in the existing groundwater basin within the County.

Priority of Water Storage in Years of Excess

- Local groundwater basin.
- Local existing surface reservoirs.
- Water banking outside of the County or a new reservoir.

APPENDIX L
DECEMBER 10, 1996 BOARD MEETING

APPENDIX L
DECEMBER 10, 1996 BOARD MEETING

This appendix contains the minutes of the December 10, 1996 meeting at which the District's Board of Directors accepted the preferred strategy and the conclusions and recommendations contained in the IWRP report. The appendix includes the agenda memorandum that District staff presented to the Board to summarize the preferred strategy, as well as letters received from environmental groups.

MINUTES
SANTA CLARA VALLEY WATER DISTRICT
BOARD OF DIRECTORS MEETING
December 10, 1996

(Paragraph numbers coincide with agenda item numbers)

A regular meeting of the Board of Directors of Santa Clara Valley Water District was held in the Board Room of the District Administration Building, 5750 Almaden Expressway, San Jose, California, at 9:00 a.m. on December 10, 1996.

Reg Mtg

1. Board members attending were Directors R. W. Gross, R. C. Kamei, J. J. Lenihan, L. Wilson, and S. Sanchez, Vice Chairperson presiding as Chairperson, constituting a quorum of the Board. Chairperson J. Judge and Director T. Estremera arrived as noted below.

Pres Bd

Staff members attending were A. C. Bennetti, D. J. Chesterman, M. P. Colabella, J. T. Ferguson, J. M. Fiedler, N. Hsueh, L. L. Keller, M. J. Klemencic, S. A. Pino, R. R. Smith, W. L. Wadlow, P. K. Whitlock, K. W. Whitman, and S. M. Williams.

Staff

2. Chairperson Sanchez opened the meeting for public comment on any subject not on the agenda. There was no one present who wished to speak.

Pub Comment

Chairperson Judge and Director Estremera arrived during the following item, and Chairperson Judge chaired the remainder of the meeting.

Judge Estremera arr

3. Mr. James M. Fiedler, Executive Project Manager, presented a report on the Integrated Water Resources Plan (IWRP) *Preferred Strategy, Conclusion, and Recommendations*, Project No. 9574. An explanation is contained in the attached agenda memorandum, and a copy of the report is on file in the District library. The Board also considered the following items pertaining to the IWRP:

Rpt on IWRP Pr 9574

i) Attached letter dated November 29, 1996, from Mr. Craig Breon, Santa Clara Valley Audubon Society;

Ltr Fr C Breon SC Audubon Soc

ii) Attached letter dated December 5, 1996, from Ms. Linda Elkind; and

Ltr Fr L. Elkind

iii) Attached letter dated December 5, 1996, from Ms. Dena Mossar, Santa Clara County Creeks Coalition.

Following his presentation, Mr. Fiedler answered Board members' questions.

Ltr Fr D Mossar SCCO Crk Coalition

Mr. Art Jensen, Bay Area Water Users Association, addressed the Board on behalf of the stakeholders group and the Bay Area Water Users Association. Mr. Jensen reported that the stakeholders reached consensus to support the report, and they appreciated the opportunity to be involved in the process. He said the process was worthwhile and well executed.

Appear A Jensen Bay Area Wtr Users Assoc

Mr. Jensen noted there was no reservoir included and believed it was partly due to the fact that there were a number of components which are smaller, easier staged, have smaller costs, and fewer impacts. He encouraged the Board to look at the different purposes a reservoir might serve other than carryover storage and whether there are benefits to those purposes.

Mr. Jensen encouraged the Board to include in future work a review of the policy issues that are raised on page 19 of the summary report. He said the stakeholders would like to be involved in the future, and it would be worthwhile for the District to continue its involvement during consideration of the open policy issues of the outstanding studies and as the strategy is implemented.

Director Lenihan suggested that the District continue looking at the possibility of reservoirs.

Mr. Jensen replied that there would be a credibility issue if alternatives found to be at the bottom of the list were continued in a determined way by the Board without having decided how they will fit into the plan.

Director Lenihan stated the issue of potable water is one that is in the same area as the reservoir issue, and he did not believe either alternative should be abandoned. He said if the idea of a new reservoir is put aside completely there may be a time when a new reservoir would be viable and necessary, but it may be too late. Director Lenihan pointed out that the amount of water lost every year due to lack of a storage facility is considerable and cannot be ignored.

Mr. Jensen replied that if reservoirs or other options (such as desalination) were considered in the form of preparations for the future, were held as alternatives in doing background work, and were appropriately keyed into the strategy it might be acceptable to the stakeholders group. He said if reservoirs, or any other option which did not make it into the mix, were taken on a single-minded directed focus involving resources it would be seen as outside the result. Mr. Jensen indicated it would be wise to be prepared for the future; and if there are opportunities to be involved with other agencies in reservoir projects that are environmentally benign, it would not be a service to the District to turn its back on those.

Director Lenihan expressed concern that it may have been interpreted by some of the stakeholders that the District agrees there will never be a dam.

In response to Director Sanchez's request for clarification on the reservoir issue, Mr. Fiedler responded that staff's intent is not to close the door on the future of a storage reservoir. As part of the conclusions and recommendations, the District is encouraged to pursue studies in a number of areas, including investigating storage options. Mr. Fiedler said that the stakeholders felt that any process that the Board engages in to pursue a reservoir further than feasibility should be subjected to a similar process as the IWRP.

In response to Director Gross's question regarding flood control versus recreation, Mr. Fiedler recalled that, in the objectives that the Board developed early in the process, opportunities to maximize the recreational uses of water was one of the objectives as well as maximizing the water quality and integration with flood control. He said those elements did not rate high in comparison to the other criteria being used to evaluate a surface storage reservoir against other options.

Appear J Bott
Sierra Club

Ms. Julia Bott, representing the Loma Prieta Chapter of the Sierra Club, addressed the Board. Ms. Bott said her concerns were addressed during the process; and, even though the report is a good start, she cares more about the implementation. Ms. Bott stated her belief that priority, support, money, and staff time should be given to implementing the core program and the preferred strategy. In addition, the public and the stakeholders must be in the loop; and the Board must address the issue of equity for efficient water use, environmental enhancement policy, and must be involved in land use discussions.

Ms. Bott reiterated previous comments that reservoirs did not get a lot of support. Some of the stakeholders advocated that reservoirs not be on the table at all but had to accept that in the future that might be an option. However, the stakeholders felt reservoirs should be a low-level option.

Appear R Cerruti

Mr. Robert Cerruti, resident of San Martin, addressed the Board and asked questions regarding importing water into the County, the percentage of water going to north county versus south county, what constitutes drought conditions, and water rates. He said he saw nothing in the report about capturing excess water and questioned how many acre-feet of water a year are lost.

Director Kamei suggested that Mr. Cerruti give any additional questions or concerns to the Clerk. She pointed out that after the drought the Board lowered the rates, which have been at the same rate for the last four years.

Director Sanchez suggested that Mr. Cerruti make an appointment with staff to discuss his concerns. He said the issue of water being wasted to the Bay is not an issue that has been ignored. Studies have been made over the years, but there is the matter of cost.

Appear L Garcia
Cy SJ

Mr. Lou Garcia, City of San Jose, addressed the Board. On behalf of the City, Mr. Garcia commended the staff and the Board for the process and recommended that the Board adopt the recommendation before it. He said the City has been dealing with two major issues which stem from the wastewater process. He thanked the Board for its action in endorsing a contract that will allow for financial participation of the District in a number of efforts being done by the City to reduce its wastewater flows through conservation by 15 million gallons per day.

Appear C Breon
SCV Audubon So

Mr. Craig Breon, Santa Clara Valley Audubon Society, addressed the Board. He indicated there are fundamental difficulties which may not allow flexibility in adapting to year-by-year changes in growth patterns in the County and expressed his opinion that the District would be better served by a more flexible system. He expressed concern that the stakeholders involved in the IWRP were given the task of coming up with roughly 100,000 acre-feet of water, but it would be nearly impossible for the District to build a reservoir that just took care of the needs of the County without overbuilding to the point where growth issues would be created in the County.

Mr. Breon said there were things his organization would have liked to have seen addressed, such as when the summer dams program was being reviewed. He stated his goal would be to eventually reduce, if not sunset, the summer dams program and find a different way to recharge groundwater because, over time, it has wreaked havoc with a lot of the local streams, especially the fisheries in the streams. He said it is difficult to determine how water supply would be done long term without looking at certain environmental ramifications. He indicated that the IWRP group had opinions about growth, but this was not the place to make recommendations on how that issue should be treated. He said the best course of action would come through the Santa Clara Valley Water Commission. Mr. Breon said he was told that the Commission is typically involved in rates but has started to discuss the issue of how water supply and growth are connected. The Commission requested that District staff educate them on how much more expensive water will be as the County grows, how risky things will be in drought years, and how various potential growth scenarios in the County interact with the District's water supply mission. He suggested the Board direct staff to go back to the Commission and ask them what issues they would like covered in a presentation. He said the Board's decisions on water supply and flood control have a profound effect on people's quality of life and growth issues affect the quality of life.

Director Lenihan thanked Ms. Bott and Mr. Breon for the excellent job they have both done in representing the environmental community.

Members of the Board thanked staff for the effort it took to put this into place and commented that they were pleased as to how well the process worked.

Director Wilson said the District needs to work in partnership with the cities in water recycling. He also said the equity in water supply issue is still an issue that should be discussed openly and resolved as a policy issue along with the cost of water, environmental enhancement, and the agricultural use of recycled water.

Acpt IWRP Preferred Resource Strat, Concl & Recm Dir Staff to Prep Final Rpt and Implementation Plan

It was moved by Director Gross, seconded by Director Kamei, and unanimously carried that the Board: (1) accept the IWRP preferred resource strategy; (2) accept the IWRP conclusions and recommendations; (3) direct staff to prepare the final IWRP report for distribution in January 1997; and (4) direct staff to prepare the IWRP implementation plan by June 1997.

Mr. Stanley M. Williams, General Manager, asked that the project team be recognized for its efforts in the IWRP process.

Mr. Fiedler thanked the Board for its confidence in staff during the process. He introduced and acknowledged the members of the project team: Mr. Scott J. Akin, Senior Project Manager; Mr. John H. Sutcliffe, P.E., Supervising Engineer; Ms. Melinda A. Minch, Project Assistant; Mr. John W. Ryan, Water Resources Economist; Mr. William G. Molnar, Supervising Engineer; Ms. Barbara A. Judd, P.E., Associate Civil Engineer; Ms. Alison M. Russell, Public Information Representative; Mr. Ray Y. Wong, Associate Engineer; Ms. Belinda A. Allen, Supervising Engineer; Ms. Louisa Squires, Supervising Environmental Planner; Ms. Carol A. Presley, Associate Civil Engineer; Mr. Kent A. Haake, Engineering Systems Analyst; Ms. Amy C. Fowler, Special Programs Engineer; and Mr. Terrence A. Neudorf, Environmental Planner; Mr. Eric Zigas; Ms. Joan Ryan, and Mr. David Blau, EDAW; and Ms. Wendy Ellyn, technical writer.

Recess

Chairperson Judge declared a recess. Upon reconvening, the same Board members and staff were present.

Rpt of Winter Preparedness and Emer Response

4. Staff provided current information on ongoing activities of the District's Winter Preparedness and emergency responses. An explanation is contained in the attached agenda memorandum.

Ms. Jeanette L. Micko, Executive Project Manager, presented an overview of the item. She asked the Board for feedback on the objectives listed in the agenda memorandum. A video of the 1995 flooding was shown.

Mr. Sutcliffe described the activities of the Emergency Operations Center (EOC) and the coordination of emergency activities.

A discussion ensued regarding improving communications with the cities' emergency departments. Ms. P. Kay Whitlock, Assistant General Manager, said staff would follow up to ensure that communications are more efficient.

Mr. Jose L. Ortiz, Supervising Engineer, Operations and Maintenance, made a detailed presentation regarding the maintenance activities done before and during flood events. He described the integrated effort between the EOC, the flood information teams, project support, and others. In his presentation, Mr. Ortiz focused on operations and maintenance (O&M) preparations, flood information activities, and O&M emergency activities. Mr. Ortiz reviewed some of the completed flood control projects.

Mr. Ortiz and Ms. Mala C. Magill, Public Information Representative, described the District's sandbag distribution program.

Director Kamei left the meeting during the following item and did not return. *Kamei Left*

5. Mr. Frank D. Maitski, Deputy Manager, Water Resources Management, presented an update on state and federal drinking water quality legislation and regulatory issues, Project No. 0002. An explanation is contained in the attached agenda memorandum.

Update Re State & Fed Drinking Wtr Qual Legisln & Reg Issues Proj 0002

Using an overhead projector, Ms. Sandy K. Oblonsky, Associate Engineer, Water Resources Management, described the drinking water quality regulations which affect the District and answered Board members' questions.

Chairperson Judge declared a lunch recess at which the members of the Public Facilities Financing Corporation were present. Upon reconvening, the same Board members and staff were present with the exception of Ms. Lauren L. Keller, Clerk of the Board, who was replaced by Ms. Michele P. Colabella, Board Specialist. *Recess*

6. The Board considered flood control zone advisory committee membership nominations and a resolution of appreciation.

Apvd FCZ Adv Comm Nom & Re of Apprec

It was moved by Director Gross, seconded by Director Lenihan, and unanimously carried by roll call vote that the Board consider the revised nominations and that Resolution No. 96-92, EXPRESSING APPRECIATION TO MARVIN ROSE, be adopted. Director Kamei was absent. *Res 96-92*

7. Board consideration of Agricultural Water Advisory Committee membership was continued for one week. *Cont*

8. The Board discussed a staff memorandum dated November 27, 1996, regarding development review schedule for Cisco Systems, use of recycled water on site, and nonpoint source impacts of parking lot runoff–responding to Board Directive No. 309.

Memo Re Dev Rev Sched Cisco Sys B Dir 309

Chairperson Judge moved the agenda to Item 10a.

Res Det & Decl Pub Necessity For Acq of Real Propty GT Steinmetz & LV Montinola Proj 3015

10a. The Board considered a resolution determining and declaring public necessity for the acquisition of real property or interest owned by Gerald T. Steinmetz and Leonor V. Montinola and authorizing acquisition of the same by eminent domain, Project No. 3015. An explanation is contained in the attached agenda memorandum.

Mr. James T. Ferguson, Executive Project Manager, read the following Need and Necessity Statement into the record:

Need & Necessity

1. The proposed public improvement is a flood control project with a recreation element (Project) on the Guadalupe River sponsored by the U. S. Army Corps of Engineers (Corps). Limits of the project extend from Interstate 880 to Interstate 280. The first phase of construction, between Interstate 880 and Hedding Street, is complete. Currently, the second phase of flood control and recreation elements are complete from Hedding Street to Coleman Avenue and the mitigation planting is scheduled to start in the Summer of 1997. The subject parcel is located within the third phase of improvements which extends from Coleman Avenue to Interstate 280. Improvements for this construction phase are described in detail in the Corps' December 1991 General Design Memorandum (GDM), for the Guadalupe River (revised June 1993). This plan was selected as the most effective in achieving the objective of flood control as described in the 1985 Guadalupe River Interim Feasibility Report and Environmental Impact Statement (FR/EIS), copies of the FR/EIS and the GDM are available through the Santa Clara Valley Water District's Clerk of the Board office. On March 30, 1992, the District's Board of Directors approved and signed an agreement with the Department of the Army to construct the flood control and river park improvements as detailed in the GDM.

2. Public interest and necessity require the Project in order to protect the public from the 100-year flood. Without the project, damages to property are estimated at $526 million (GDM, pages 9-13), creating an average annual flood protection benefit of $24.2 million (GDM, pages 9-18). The benefit/cost ratio of the Project has been determined to be 1.9 (GDM, pages 9-23).

3. Exhibit A, attached hereto and incorporated by this reference, shows the subject property in the vicinity of the Guadalupe River 100-year floodplain.

   Exhibit B is a plan view of the subject property, the proposed flood control public improvements, and the required property, a reduced copy of this plan is attached hereto and incorporated by this reference.

   Exhibit C shows a typical cross-sectional view at the location of the subject property looking downstream, a reduced copy of this cross-section is attached hereto and incorporated by this reference.

4. The Project is planned and located in the manner that will be most compatible with the greatest public good and least private injury in that acquisition of the subject property will not only protect this property, but also a number of properties in the vicinity, from flooding and construction of a channel access ramp for maintenance purposes at the southwest quadrant of New Julian Street would result in severing the subject

property's access (see Exhibit B). These improvements are described in Chapters 3 and 4 of the GDM.

The subject property sought to be acquired (APN 259-29-045, see Exhibit B) is necessary for the Project because it is necessary to widen both banks of the channel to provide 100-year flood capacity and provide continuous maintenance access to the Project along the west bank. The subject property is within the Guadalupe River 100-year floodplain.

As outlined in the 1985 FR/EIS, preliminary plans were formulated and evaluated to alleviate flood damages from the Guadalupe River in the downtown area of San Jose. These plans include four options: (a) No Action Plan; (b) Nonstructural Plan; (c) Impoundments; and (d) Channel Modification Plan. After evaluating each option, three alternatives were recommended for detailed study. These included: (1) No Action Plan; (2) Widened Earth Channel Plan, from Interstate 880 to Park Avenue; and (3) Widened Earth Channel and Bypass Channel Plan, from Interstate 880 to Interstate 280.

In order to achieve the goals of providing 100-year flood protection and preserving existing riparian vegetation, alternative number 3 (Widened Earth Channel and Bypass Channel Plan, from Interstate 880 to Interstate 280) was selected and then recommended for construction. Prior to being approved by the Corps, the plan was endorsed by the Mayor of San Jose and the District Board of Directors.

As shown on Exhibit B, project work immediately south of New Julian Street is primarily an east bank widening, with widening on the west bank only for a channel access ramp. The west bank channel access ramp is immediately adjacent to the subject property (APN 259-29-045, see Exhibit B). The existing roadway providing access to the subject property is approximately five feet lower than the proposed access point at New Julian Street. The cul-de-sac at the street fronting the subject property, Autumn Court, must be raised in height as required for the channel access ramp to gain access from New Julian Street. Access to the subject parcel will be severed due to placement of fill during the construction of the channel access ramp. The west bank widening and fill for the channel access ramp will also provide additional capacity for flood flow and act as embankment for flood protection. The work described above is referenced in page 3-3 and Plate 9A of the GDM.

The required right of way shown on Exhibits B and C conforms with the recommended measures presented in the Corps' FR/EIS and GDM. The District is in the process of acquiring the necessary project right of way contiguous to the subject property.

5. Acquisition of lands for the construction and maintenance of flood control measures along Guadalupe River Project is authorized by Section 6 of the District Act and Sections 1240.010, 1240.120, and 1240.150 of the California Code of Civil Procedure.

It was moved by Director Sanchez, seconded by Director Estremera, and unanimously carried by roll call vote that Resolution No. 96-93, DETERMINING AND DECLARING PUBLIC

Res 96-93

NECESSITY FOR THE ACQUISITION OF REAL PROPERTY OR INTEREST THEREIN AND AUTHORIZING ACQUISITION OF THE SAME BY EMINENT DOMAIN, be adopted. Director Kamei was absent.

Mr. Anthony C. Bennetti, General Counsel, distributed information to the Board on another property being acquired by the District in which the Board expressed interest.

The Board considered the following items simultaneously:

10b. Amendment to agreement with Harvey M. Rose Accountancy Corporation for Board-directed audit of flood control functions, Project No. 6006. An explanation is contained in the attached agenda memorandum;

Apvd Amend to Agmt HM Rose Accountancy Corp Proj 6006

10c. Attached proposed letter to Mr. Roland Au-Yeung, State of California, Department of Transportation, regarding sign installation request at Highway 17, James J. Lenihan Dam at Lexington Reservoir;

Ppsd Ltr R Au-Yeung Caltrans Re Sign Install Hwy 17

10d. Attached proposed letter to Mr. Paul Romero, Director, Santa Clara County Parks and Recreation Department, regarding proposed sign installation at Highway 17, James J. Lenihan Dam at Lexington Reservoir; and

Ppsd Ltr P. Romero SCCO Parks Re Prop Sign JJ Lenihan Dam at Lexington Res

10e. Change Order No. 7 (Final) and Notice of Completion of Contract and Acceptance of Work, Matadero Creek Phase IV, El Camino Real to Stanford Channel Confluence, RGW Construction, Inc., Contract No. C0369, Project No. 1021. An explanation is contained in the attached agenda memorandum.

CCO No 7 (Final) & NOC & AW Matadero Crk Ph IV RGW Constr C0369 Proj 1021

It was moved by Director Estremera, seconded by Director Lenihan, and unanimously carried that (10b) the Board approve the modifications to Appendix Four insurance requirements: (1) require that insurance will be to limits at not less than $1,000,000 combined single limit for bodily injury and property damage and shall be Business or Comprehensive General Liability and Non-owned Auto Liability Insurance; (2) delete Bodily Injury at $300,000 per occurrence and Property Damage at $50,000 per occurrence/$200,000 aggregate; (3) delete the 30-day cancellation clause; (4) require evidence of Worker's Compensation Insurance; and (5) add that since the contracting firm is self-insured for errors and omissions, no proof of insurance is required for this type of coverage; (10 c and d) the Chair be authorized to sign the proposed letters; and (10e) the Chair be authorized to execute Change Order No. 7 (Final) for a net increase of $49,504.58 to the contract and that the Notice of Completion of Contract and Acceptance of Work be filed. Director Kamei was absent.

11a. The Board noted the membership and payroll reporting audit performed by California Public Employees' Retirement System. An explanation is contained in the attached agenda memorandum.

CALPERS Audit

11b. The Board noted the attached letter dated November 19, 1996, to the Santa Clara County Board of Supervisors from Mr. Gary L. Harris regarding application for upcoming vacancy on Santa Clara Valley Water District Board of Directors.

Ltr Fr GL Harris Re Dist Bd Vacancy

11c. The Board noted the status report of residential leases—Stevens Creek and Guadalupe River—and nonresidential leases Countywide. An explanation is contained in the attached agenda memorandum.

Rpt of Residential Leases Stevens Crk & Guadalupe Rv

Chairperson Judge moved the agenda back to Item 9.

9a. Mr. Williams referred to letters which were drafted for the Chair's signature to San Jose Mayor Susan Hammer and to the Chair of the Treatment Plant Advisory Committee. He requested Board authorization for the Chair to sign the letters.

Auth Chair sign Ltrs to SJ Mayor S Hammer and TPAC Chair

It was moved by Director Wilson, seconded by Director Estremera, and unanimously carried that the Chair be authorized to sign the letters. Director Kamei was absent.

9b. Mr. Walter L. Wadlow, Assistant General Manager, reported that the California Urban Water Agencies (CUWA) were concerned that CALFED staff had not devoted enough attention to drinking water quality improvements. CUWA retained three nationally known experts to do some work in that area as advisory to the Bay-Delta program. Their charge was to look at what type of water quality would be needed in the water from the Delta in order to enable the urban water users to meet anticipated water quality standards. The information will be provided to CALFED.

CUWA

Mr. Williams reported that another action taken by the CUWA Board was the issue of conservation initiatives and their enforcement and sanctions. The CUWA Board wants to focus on analysis and evaluation.

9c. Mr. Williams said he was contacted by Dr. Carlene Young who requested that she be permitted to meet with the Board in a closed session to discuss a report she prepared. Mr. Williams said he requested a copy of the report and then he would get it into the agenda process. It was Dr. Young's understanding that she had a product that she was supposed to go over with the Board. Mr. Williams said he signed the original contract, which included mediation and some organizational assessment. The amendment to that contract, which was approved by the Board, was for an additional $58,000 and was for a different mediation and an extension of that organizational assessment. Mr. Williams said he reviewed the contract and did not believe the report should go directly to the Board, unless the Board members believe they made some other commitment with Dr. Young. Mr. Williams stated his belief that the report should be received by him; and if there is information that needs to go to the Board, he should determine that and bring the report to the Board in the proper way. Mr. Williams also stated his belief that there is no basis for having a closed session.

Disc Rpt C Young

There was Board consensus that the organizational assessment was a continuation of the contract between Mr. Williams and Dr. Young and that the report should go to Mr. Williams.

Chairperson Judge said he could understand where Dr. Young might have had the understanding that she was doing the report under the direction of the Board because the Board approved the contract and generated the concept of what work needed to be done.

In response to Director Estremera's question, Mr. Williams replied that he has not seen the assessment. He said the first part, where Dr. Young interviewed the management group on their perception of how the restructuring was going and the other issues on decision making, was done for him. The contract was amended to include a broader number of employees, particularly African-American employees.

Director Wilson said he believed this was primarily a management issue.

Director Estremera stated that the second part of the study seems to relate specifically to a race conscious basis which obviously was different than the original study requested by Mr. Williams.

Mr. Williams read a portion of the language of the amended contract. The proposal was to "expand the scope of services of the original contract with regards to organizational and cultural assessment to include the following: (1) greater representation of District personnel in direct interviews or random sample of employees and selective sample of African-Americans and other racial and ethnic group members; (2) administer paper and pencil objective assessments to members with interpretation analysis; (3) meetings with various teams or groups, e.g., the Ethics Committee; (4) observation of group and team meetings; (5) review of pertinent documents, report, mission or goal statements . . ."

Chairperson Judge suggested that the Board hear Dr. Young's presentation.

Director Sanchez said he believed it was the General Manager's report, and Mr. Williams should report to the Board.

Director Estremera suggested the Board hear Dr. Young's report and deal with the results accordingly. He said whether the Board sees the report or not could be a separate issue.

Director Wilson said he still felt this is an issue for the General Manager to review first and then it should come to the Board. He said Dr. Young could be asked to participate when the General Manager presents the report to the Board.

Director Sanchez concurred.

Mr. Williams said that, because he has not seen Dr. Young's report, he had no idea what kind of report it is or what it has in terms of recommendations. He said he wanted clarification from the Board because he did not wish to misunderstand that this was some work done for the Board only.

Director Wilson said he would be willing to make a motion that the Board direct the General Manager to receive the report and bring the information to the Board.

Chairperson Judge said he was inclined to oppose the motion. He suggested the Board allow Dr. Young to come in and make her report given that she believes her relationship is with the Board.

Director Estremera stated there were two issues involved. One is whether the report should be filed with the Board or the General Manager. He said the Board does not have to see the report but could listen to Dr. Young and decide the issue of where the report should be filed then deal with the report. He said it is an honest issue about whether Dr. Young is responsible to file her report with the Board or with the General Manager.

Director Lenihan said the Board should decide whether the report should be filed with the Board or the General Manager. He said his opinion was that the report should be filed with Mr. Williams, and Mr. Williams should report to the Board.

Director Estremera agreed that the Board should make the determination as to where the report should be filed. However, he said he would prefer to hear both sides in order to make that determination. He said making the determination does not require the Board to review the report or do anything with the report for that matter.

Director Wilson said the Board should follow standard contract procedures and have the report go through management and to the Board.

Director Lenihan seconded Director Wilson's motion that the Board direct the General Manager to receive the report and bring the information to the Board. The motion carried on a 4:2 vote. Director Estremera and Chairperson Judge voted no; Director Kamei was absent.

Dir GM to Receive Rpt of C Young

9d. Mr. Williams announced that Mr. Robert W. Howard, Deputy Group Manager, has resigned from District service effective December 20, 1996.

RW Howard Resig

Chairperson Judge moved the agenda to Item 12.

12a. There were no Board Committee reports.

12b)i. Director Gross requested a report on the District's compressed gas fueling station.

Bd Dir

12b)ii. Director Sanchez requested a report on a meeting with the San Luis and Delta-Mendota Authority on the reallocation agreement.

Disc SL&DMA Reallocation Agmt

Mr. Wadlow replied that the reallocation agreement was briefly discussed between the Authority and Mr. Roger Patterson of the U. S. Bureau of Reclamation (Bureau). There was a separate meeting with District staff and staff from Westlands Water District in order to schedule the remainder of the work. The Bureau is conducting a public review process until the end of December. It will probably take the month of January to prepare the language with the Bureau and the shortage year providers.

12b)iii. Director Wilson reported on his attendance at the Association of California Water Agencies (ACWA) conference in San Diego. Director Wilson pointed out that the District is not referenced in the California Water Management Plan and suggested the District may wish to consider an AB 3030 plan.

ACWA Conf

Director Wilson also reported on his attendance at a meeting of the California Water Commission. *CWC Mtg*

12b)iv. Director Lenihan also reported on the ACWA conference.

Director Sanchez left the meeting and did not return. *Sanchez Left*

12c. Director Gross requested authorization for Director Wilson to attend the WateReuse Committee meeting on January 16. *Auth Dir Wilson Attend WateReuse Mtg*

It was moved by Chairperson Judge, seconded by Director Lenihan, and unanimously carried that Director Wilson be authorized to attend the meeting. Directors Kamei and Sanchez were absent.

12d. Ms. Colabella reviewed the new Board directives. *Bd Dir*

12e. Director Wilson discussed the possibility of a barbecue for retired employees in order to brief them on the activities of the District. *BBQ for Retired Emp*

There was Board consensus to direct staff to look into the possibility of a barbecue.

13. Chairperson Judge adjourned the meeting in memory of former District employee Benny Ruiz at 2:10 p.m. to 9:00 a.m. on December 17, 1996, at 5750 Almaden Expressway, San Jose, California. *Adjourn in Memory of B Ruiz*

Lauren L. Keller
Clerk/Board of Directors

Approved:

Date:

FC 1025 (01-13-92)

AGENDA MEMORANDUM

AGENDA DATE 12/10/96 ITEM NO. 3 DEPARTMENT Executive Project Manager

ZONE WU PROJECT NO. 9574 NAME Integrated Water Resources Plan

SUBJECT: Integrated Water Resources Plan Preferred Strategy, Conclusion, and Recommendations

RECOMMENDATIONS:

That the Board:

1. Accept the Integrated Water Resources Plan (IWRP) Preferred Resource Strategy.
2. Accept the IWRP Conclusions and Recommendations.
3. Direct staff to prepare the final IWRP Report for distribution in January 1997.
4. Direct staff to prepare the IWRP Implementation Plan by June 1997.

RATIONALE:

At the January 23, 1996 Board meeting, staff was directed to develop a plan to achieve water supply reliability for the County and bring the plan to the Board for consideration by December 1996. Staff was further directed to proceed with this effort while incorporating community input. With the aid of stakeholders representing a range of community interests together with the views expressed by the public at meetings and forums, staff has developed a preferred strategy which will provide Santa Clara County with a long-term road map and a short-term blueprint to achieve water supply reliability. The preferred strategy and recommendations are provided in the enclosed report.

The preferred strategy is designed to meet a future demand range of between 350,000 and 500,000 acre-feet and is designed for optimum flexibility to meet changing conditions and demands. To achieve this, staff has developed recommendations which will assure that this flexibility is achieved through staged review, development, and implementation of components over time.

In addition, staff has endeavored to incorporate the views and opinions of stakeholders. Toward this end, staff was able to reach consensus with the Level 1 core group of stakeholders who recommended that the Board accept the preferred strategy. Stakeholders predicated their support on several factors, which were discussed at length at the final Level 1 meeting on November 14, 1996. Staff has incorporated the discussion in both the preferred strategy and recommendations. A summary of the meeting is provided as an appendix to the report.

SUMMARY:

The preferred strategy is comprised of a series of actions and analysis designed to provide a flexible and effective response to the future demand range of between 350,000 and 500,000 acre-feet per year. To achieve this goal, the preferred strategy calls for the implementation of four water supply components and a series of core elements. The components of the preferred strategy include:

1204e

APPROVED
DEC 10 1996

Water Banking

Between 100,000 and 350,000 acre-feet of water banking agreements to be developed over the next 5 to 15 years.

Water Recycling

Partner in water recycling. Develop a minimum of 6,000 acre-feet from infill; additional recycling potential to be pursued jointly with wastewater agencies.

Demand Management

An additional 11,000 acre-feet per year of water use reductions to be implemented after the 2002 conclusion of the Water Conservation Memorandum of Understanding. This is in addition to the 46,000 acre-feet per year already accounted for in the IWRP baseline.

Long-Term Water Transfers

Between 25,000 and 50,000 acre-feet per year of long-term water transfer agreements to be developed over the next 5 to 20 years.

Core Elements

Include actions needed to (1) ensure the validity of the baseline assumptions; (2) monitor and evaluate resource options; and (3) help meet District objectives.

Implementation of the preferred strategy is expected to occur in stages. The first stage calls for implementation of those components contained in the intermediate action program. The strategy provides for full flexibility to implement components within any of the three action categories (minimum, intermediate, and maximum). Subsequent IWRP project updates would determine which action category should be pursued. In addition, the preferred strategy includes a series of contingency triggers and actions to provide appropriate responses to future changes and uncertainties. The enclosed report includes a complete description of the preferred strategy, contingency triggers, and proposed contingency actions.

At their November 14 meeting, Level 1 stakeholders reviewed the draft IWRP report and the preferred strategy. The core stakeholders agreed to support the preferred strategy with the understanding that additional study would occur with regard to the distribution of benefits and costs associated with recycled water. In doing so, the stakeholders sought to ensure that the District work in collaboration with local wastewater agencies to help ensure the economic well-being of the community. The stakeholders also indicated a desire to continue their participation into the IWRP's implementation phase.

In addition to implementing those components contained in the intermediate action program of the preferred strategy, the District should also seek to complete several additional studies during the next three to five years. These studies are intended to: (1) further develop possible contingency actions; (2) update baseline assumptions in anticipation of the next IWRP cycle; and (3) identify opportunities for addressing the core elements. This work includes:

- Feasibility study of indirect potable recycling
- Analysis of additional nonpotable recycling
- Investigation of storage options
- Development of a countywide basin management plan
- Development of a demand management master plan
- Update of the District's water demand projections
- Evaluation of system vulnerability
- Evaluation of the reoperation of District facilities

District staff and counsel have reviewed the preferred strategy and determined that an Environmental Impact Report is not necessary at this time for the following reasons: (1) the feasibility level nature of this work does not require an Environmental Impact Report; (2) the proposed phasing of components would occur up to five or more years in the future and, therefore, environmental analysis would be premature; and (3) environmental documentation for each of the proposed components would either not be required or would be the responsibility of another agency.

FINANCIAL IMPACTS:

The estimated cumulative cost to implement the intermediate action program of the preferred strategy between 1997 and 2002 is $45 million. The estimated cumulative cost to implement the preferred strategy between 1997 and 2020 is $373 million, in 1996 dollars. A more detailed discussion of preferred strategy costs and their effects on water rates is provided in the preferred strategy and recommendations document.

Santa Clara Valley
Audubon Society
Founded 1926

Friday, November 29

Dear Friends,

The future of water in Santa Clara County is in your hands! Well, sort of.

On **Tuesday, December 10 at 9:00 A.M.** the Water District Board will be considering and likely voting on the report compiled by their Integrated Water Resources Planning (IWRP) group. Julia Bott and I have spent the last six months as representatives of the environmental community in this process, and we could use your help to finish the job.

We need you to:

A) **Attend the hearing** and tell the District to support the preferred alternative, then add your opinions of the issues. The hearing will be held at the main District offices at 5250 Almaden Expressway in San Jose. That is about 1 mile west of Highway 85, about 4 miles south of the 85/17 intersection.

B) If you can not attend the hearing, **write a brief letter** (the talking points are below). The address is:

Chairman Judge and Board Members
Santa Clara Valley Water District
5250 Almaden Expressway
San Jose, CA 95118

Julia and I agree that our concerns were served well by this process In brief, the preferred alternative calls for:

- **No new dams in the County's** future--despite the fact the a couple Board members were heavily favoring this alternative, it seems that the overwhelming opinion of the IWRP group has begun to change their minds. This was our top priority.

- **There is a strong water conservation element in the package.** This is still clearly the most environmental water alternative out there.

- **There is no call for increased pumping in the Delta.** While there are few direct implications for the Delta in the Plan, there remains a call for increased water banking and long-term transfers in the future. How these deals are implemented may have ramifications for the Delta and its tributaries.

22221 McClellan Road, Cupertino, CA95014 Phone 408 • 252 • 3747 Fax 408 • 252 • 2850

Printed on Recycled Paper with Soy Ink

- **There is flexibility.** The Board and its staff will revise the Plan as circumstances dictate. Changes in water consumption or growth statistics will be factored in over time. Thus, we want the IWRP group to continue meeting occassionally to make sure the District does not pursue costly water supply options that could fuel growth and/or further burden the ecosystem.

- **There is a possibility of addressing growth issues.**

Julia and I need you to attend the hearing and/or write a letter for several reasons

1) The Board needs to hear that this plan is backed by the environmental community and will be supported by the public. District staff did a good job of including a wide variety of interests from around the County, and thus the plan will have broad support.

2) Our credibility as representatives of the environmental community is boosted when you show up. The Board needs to hear that the concerns expressed by Julia and I are widely shared. The more our sentiments and issues are voiced now, the more leverage we will have to push those issues in the future.

3) The future of the Delta is still a critical issue. While the IWRP plan does not call for increasing the amount of water Santa Clara gets from the Delta, we need to ensure that the Board recognizes their share of the responsibility for Delta restoration and molds their water needs to that.

4) To back up the preferred alternative, voice your concerns about the financial and environmental costs of pursuing a dam and reservoir, either in or outside the County.

5) Tell the Board that growth is an issue worth addressing. The IWRP process could not easily deal with this issue, but the Board has heard similar concerns from other entities, and may move to discuss the issues with local cities.

Finally, thanks to those of you who attended the wider public participation session in August. Your thoughts and sentiments helped the other IWRP representatives understand our concerns, and allowed Julia and I to pursue our goals.

Copies of the recommendation are available from the Water District; contact Jim Fiedler at 265-2600. If you have any questions or suggestions for us, please call Julia at 415-398 0414 or me at 408 [illegible] 3740.

Thanks!
Craig

LINDA V. ELKIND
14 HAWK VIEW
PORTOLA VALLEY, 94028

December 5, 1996

Chairman Judge and Board Members
Santa Clara Valley Water District
5250 Almaden Expressway
San Jose, CA 95118

Dear Chairman Judge and Board Members,

Re: the Integrated Water Resources Planning Group Report.

As a member of the board of Committee for Green Foothills and a founding member of the Santa Clara Creeks Coalition, I urge that you support tho Planning Group's preferred alternative.

Population growth, thus increased demand for water, cumulative environmental impacts, and long term incremental costs are the criteria which define my perspective on this report.

I support the IWRP group preferred alternative because, it recommends that the SCVWD not plan to build any new dams in the future. Dams are expensive to build and are environmentally devastating. They destroy the Riparian habitat and free flowing riverine systems more than 90% of which have already been destroyed in California.

The most cost effective method to stretch supply is by continuing and expanding your programs to promote water conservation. Therefore, I support the strong water conservation element in the report.

Improvement of Delta water quality is a major ecological necessity. The planning group has acted responsibly by not proposing that the SCVWD increase supply by increasing pumping from the Delta. I am concerned that the expectation that the SCVWD will increase water banking and long-term transfers in the future could, in fact, increase pumping from the Delta. Thus, I support the idea that the IWRP group continue to meet to advise the district on options if changes in water demand occur.

Thank you for your consideration.

Sincerely,
Linda Elkind

Dena Mossar
Santa Clara County Creeks Coalition
1024 Emerson St.
Palo Alto, CA 94301
December 5, 1996

Chairman Judge and Board Members
Santa Clara Valley Water District
5250 Almaden Expressway
San Jose, CA 95118

Dear Chairman Judge and Board Members

I am writing to encourage you and the members of the Board to approve the preferred alternative prepared by your Integrated Water Resources Planning (IWRP) group.

The Santa Clara County Creeks Coalition is pleased that the preferred alternative calls for no new dams in the county; contains a strong water conservation element and does not require increased pumping in the Delta.

We hope that you will accept your share the of responsibility for Delta restoration by limiting futute demands on Delta water. Though the IWRP group was not able to deal with the issues of growth , we encourage the Board to begin to address these issues with local cities. It is important that the district not pursue costly water supply options that could fuel growth and further burden our ecosystems.

Thank you for considering our request.

Sincerely,

Dena Mossar
for the Santa Clara County Creeks Coalition

Greenbelt Alliance
PEOPLE FOR OPEN SPACE

December 5, 1996
Chairman Judge and Board Members
Santa Clara Valley Water District
5250 Almaden Expressway
San Jose, CA 95118

RE: Integrated Water Resource Plan

Dear Chairman Judge and Board Members,

Thank you for giving us the opportunity to comment on your recent report. We applaud staff's efforts in addressing a wide variety of environmental and economic issues. We view the Integrated Water Resource Plan to be sound in that it does not call for the development of new dams in our county and stresses water conservation.

Since water is a finite resource, continued urban growth within our region will be a significant factor in determining how limited water supplies are allocated to Santa Clara County. Providing water services to areas that have existing infrastructure and conservation devises in place is more cost effective to local municipalities and encourages lower per capita water use.

As part of this planning process, we encourage the Water Board to address the nexus between local land use and the provision of water services. The cost of sprawl development includes providing water services outside of the urban core. Santa Clara County can no longer afford to dilute the quality of services, including water, in order to provide service to development at the urban fringes.

Additionally, we are concerned about the possibility of construction of the Los Banos Grandes dam project. Funding the provision of water services to regions outside of the county could trigger development of bedroom communities. This would cause further congestion on already overcrowded highway systems in the Bay Area. Instead of funding the dam project, we support your efforts to encourage water conservations.

Thank you for the opportunity to comment on the Integrated Water Resource Plan. We hope to work with you more in the future.

Sincerely,
Nancy R. White
Nancy R. White, South Bay Field Associate

MAIN OFFICE ◆ 116 New Montgomery Suite 640, San Francisco CA 94105 ◆ (415) 543-4291
SOUTH BAY OFFICE ◆ 1922 The Alameda Suite 213, San Jose CA 95126 ◆ (408) 983-0539
NORTH BAY OFFICE ◆ 520 Mendocino Avenue Suite 200, Santa Rosa CA 95401 ◆ (707) 575-3661
EAST BAY OFFICE ◆ 500 Ygnacio Valley Road Suite 1502 Walnut Creek CA 94596 ◆ (510) 932-7776

184 Lockhart Lane
Los Altos, CA 94022
December 9, 1996

Chairman Judge and Board Members
Santa Clara Valley Water District
5250 Almaden Expressway
San Jose, CA 95118

Dear Board Member:

I am grateful for the work put in by the Integrated Water Resources Planning Group in helping us providing us with alternatives toward planning for water use here in Santa Clara County. I urge you to support the preferred alternative because it recommends:

- No new dams for Santa Clara County—too costly in money & environmental degradation
- Efforts to promote water conservation—we live in a dry climate and need to protect our water supplies
- No demand for increased pumping in the Delta—we should meet out needs in other ways
- Opportunity for flexibility in meeting future needs without mandating costly construction which will tend to facilitate increased growth

Sincerely,

Ruth Troetschler

Ruth Troetschler

APPENDIX M
BIBLIOGRAPHY

APPENDIX M
BIBLIOGRAPHY

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